



**MODEL 68 SR TRIPLEX MOWER**  
**MODEL 68 DL TRIPLEX MOWER**



## **OWNER'S MANUAL**

**Includes Operation, Maintenance and Parts List**

---

**NATIONAL MOWER CO.**

700 Raymond Ave., P.O. Box 14299  
St. Paul, Minnesota 55114-0299, U.S.A.  
Phone (651) 646-4079 – Fax (651) 646-2887  
[www.nationalmower.com](http://www.nationalmower.com)

June 2003



## **ONE YEAR LIMITED WARRANTY**

For the period of one year from the date of purchase (45 days if the product is used for rental purposes), National Mower Company will repair or replace free of charge, for the original purchaser, any part or parts found by inspection to be defective by our Factory Authorized Service Station or by the Factory at St. Paul, Minnesota to be defective in material or workmanship or both. All transportation charges on parts submitted for repair or replacement under this warranty shall be paid for by the purchaser.

This warranty does not include engines, engine parts or tires which are covered under separate warranties furnished by their manufacturer or supplier. All service under this warranty will be furnished and performed by our Factory Authorized Service Stations.

### **THERE IS NO OTHER WARRANTY EXPRESSED OR IMPLIED**

Warranties, including those of merchantability and fitness for a particular purpose, are limited to one year from purchase or 45 days if the product is rented, and to the extent permitted by law, any and all implied warranties are excluded. The above remedy of repair and replacement of defective parts is the purchaser's exclusive remedy for any defect, malfunction, or breach of warranty. Liability for incidental or consequential damages under any and all warranties is excluded to the extent permitted by law.

**NATIONAL MOWER COMPANY**  
P.O. Box 14299  
700 Raymond Avenue  
St. Paul, Minnesota 55114-0299, U.S.A.

Phone (651) 646-4079  
Fax (651) 646-2887  
[www.nationalmower.com](http://www.nationalmower.com)

# TABLE OF CONTENTS

Warranty .....	2
Introduction .....	3
Safety Information .....	4
Safety and Control Decals .....	7
Receipt of Shipment .....	11
Uncrating Instructions .....	11
Assembly .....	12
Preparation .....	14
Operation .....	14
Maintenance .....	18
Maintenance Record .....	26
Troubleshooting .....	27
Parts List .....	28
Frame & Running Gear .....	28
Running Gear & Misc. Parts - 68 DL .....	30
Seat Mounting & Belt Guards .....	31
Drive Mechanism - Upper Portion .....	32
Drive Mechanism - Middle Portion .....	34
Drive Mechanism - Lower Portion .....	35
Drive Mechanism - 68 DL .....	36
Rear Axle & Differential .....	38
Wing Cutting Units .....	40
Rear Cutting Unit .....	42
Skids, Reel End Shields & Guards .....	44
Roller & Standard Scrapers .....	45
Roller Scraper Kit, Dial-A-Height™ .....	46
Dial-A-Height™ Roller Adjuster Kit .....	47
Dial-A-Height™ Adjuster .....	48
Safety Switches .....	49
Electrical Diagrams .....	50
Electrical Parts .....	51
Specifications .....	52
Parts Ordering Information .....	53
Declaration of Conformity .....	55

## INTRODUCTION

This manual has been prepared by National Mower Company as an aid to users in the assembly, safe operation, maintenance, adjustment and ordering replacement parts. Additional information will gladly be furnished by calling or writing the manufacturer or his authorized agent.

Please furnish us with the Model Number, Serial Number and Date of Purchase when contacting us about your machine. Designations of right, left, front and rear are used as if the operator was sitting in the mower seat.

Before operating mower, carefully and completely read this manual. The contents provide you with an understanding of safety instructions and controls during normal operation and maintenance. Understand all safety precautions provided in the manuals. Review control functions and operation of the mower. Do not operate the mower unless all controls function as described in this manual. Review recommended lubrication, maintenance, and adjustments.

# SAFETY INFORMATION

The safety alert words below are used in this manual to identify potentially hazardous conditions. Their definitions are:

**DANGER** means "IMMINENTLY HAZARDOUS SITUATION! If not avoided, WILL RESULT in death or serious injury."

**WARNING** means "POTENTIALLY HAZARDOUS SITUATION! If not avoided, COULD RESULT in death or injury."

**CAUTION** means "POTENTIALLY HAZARDOUS SITUATION! If not avoided, MAY RESULT in minor or moderate injury." It may also be used to alert against unsafe practices.

The safety alert triangle symbols on your mower point out important safety precautions.



These symbols mean:

ATTENTION!  
PERSONAL SAFETY IS INVOLVED!  
BECOME ALERT!  
OBEY THE MESSAGE!

## NATIONAL MOWER SAFE OPERATING PRACTICES

### 1. TRAINING

Know the control functions and how to stop quickly. READ THE OWNER'S MANUAL.

### 2. PREPARATION

Clear the work place of objects which might be picked up by the blades and thrown.

Handle fuel with CAUTION - it is highly flammable.

- Use an approved fuel container.
- Never remove the fuel tank cap or add fuel to a running or hot engine. Never fill the fuel tank indoors. Wipe up spilled fuel immediately.
- Open garage doors to allow ventilation if engine is run inside – exhaust fumes are dangerous. Do not run engine in any enclosed area.

Keep the mower in safe operating condition. Make sure that all safety switches are operating properly and all

safety guards are in place at all times, except during servicing.

Keep all nuts, bolts, and screws tight.

### 3. OPERATION

Wear approved safety glasses or goggles when operating the mower.

Do not allow children to operate mower. Do not allow adults to operate mower without proper instruction.

Do not carry passengers. Keep children and pets at a safe distance from an operating mower. Stop the mower if anyone approaches the mower.

Disengage all cutting-unit clutches and shift into neutral before attempting to start the engine. Disengage main clutch before shifting cutting-unit clutches.

Disengage power to the cutting units and stop the engine before leaving the operator's position.

Disengage power to the cutting units and stop the engine before making any repairs or adjustments.

Disengage power to the cutting units when transporting or not in use.

Take all possible precautions when leaving the mower unattended, including shifting into neutral, setting the parking brake, stopping the engine and removing the ignition key.

Watch for dangerous traffic when crossing or near roadways.

Never direct the discharge of material from operating reels toward bystanders nor allow anyone near the mower.

The mower and reels should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the mower.

Proceed as follows when mowing:

- Mow only in daylight or in good artificial light.
- Never make a cutting height adjustment while the engine is running.
- Shut the engine off when removing grass or unclogging reels.

This machine is to be used only as a grass cutter or lawn mower.

Never operate the mower while using drugs, medications, or alcohol. Safe operation requires complete and unimpaired attention. Never allow anyone to operate the mower when their alertness or coordination is impaired.

Do not wear loose clothing or loose shoelaces, which may become entangled in mower controls or drive components.



Do not mow in reverse, unless absolutely necessary. Always look down and behind before and during reverse motion.

Shut off and raise the cutting units before operating the mower at transport speed. (Model 68 DL only.)

Do not reverse battery connections. Damage to the mower can result. Battery gases are explosive and can cause death or injury. Keep open flames, sparks, and smoking materials away from batteries. Battery fluid contains sulfuric acid. Contact with skin, eyes, or clothing can cause chemical burns. Wash immediately and seek medical assistance. Wear protective clothing and safety glasses when handling a battery. (Model 68 DL only.)

#### **4. HILL OPERATION**

Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes — never across steep slopes. Do not exceed a slope of 15° in any direction.

Reduce travel speed on slopes and in sharp turns to prevent tipping or loss of control. Use extreme caution when changing direction on slopes.

Watch for holes in the terrain and other hidden hazards.

Do not shift into neutral and coast downhill.

Use extreme care when mowing near dropoffs or embankments. The mower could roll over if a wheel goes over the edge, or if an edge caves in.

If mower stops going uphill, disengage power to the cutting units and slowly back down.

#### **5. MAINTENANCE**

Never store the mower, with fuel in the tank, inside a building where fumes could reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

Keep the engine free of grass, leaves or excessive grease to reduce a fire hazard.

Do not change the engine governor settings or overspeed the engine.

Keep non-skid surfaces clean. Replace the non-skid material if worn, damaged, or missing.

Wear appropriate safety gear, including safety glasses and gloves, while servicing the mower.

### **ISO SAFE OPERATING PRACTICES**

#### **1. TRAINING**

Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.

Never allow children or people unfamiliar with these instructions to use the lawnmower. Local regulations can restrict the age of the operator.

Never mow while people, especially children, or pets are nearby.

Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

Do not carry passengers.

All drivers should seek and obtain professional and practical instruction. Such instruction should emphasize:

- the need for care and concentration when working with ride-on machines;
- control of a ride-on machine sliding on a slope will not be regained by the application of the brake. The main reasons for loss of control are:
  - insufficient wheel grip;
  - being driven too fast;
  - inadequate braking;
- the type of machine is unsuitable for the task: do not use mower for unsuitable tasks;
- lack of awareness of the effect of ground conditions, especially slopes;
- hitching and load distribution: do not hitch or tow other devices.

#### **2. PREPARATION**

##### **WARNING**

Gasoline (petrol) is highly flammable. Store fuel in containers specifically designed for this purpose. Refuel outdoors only. Do not smoke while refuelling. Add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot. If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any sources of ignition until fuel vapors have dissipated. Replace all fuel tanks and container caps securely.

While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.

Thoroughly inspect the area where the equipment is to be used and remove all objects which can be thrown by the machine.

Replace faulty silencers.

Before using, always visually inspect to see that the reels, bed knives, and cutting unit assemblies are not worn or damaged. Replace worn or damaged reels and bedknives in sets to preserve balance.

On multi-reel machines, take care as rotating one reel can cause other reels to rotate.

# SAFETY INFORMATION

---

## 3. OPERATION

Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.

Mow only in daylight or good artificial light.

Before attempting to start the engine, disengage all cutting unit clutches and shift into neutral.

Do not use on slopes of more than 15°.

Remember there is no such thing as a safe slope. Travel on grass slopes requires particular care. To guard against overturning:

- do not stop or start suddenly when going up or downhill;
- engage clutch slowly, always keep machine in gear, especially when travelling downhill;
- machine speeds should be kept low on slopes and during tight turns;
- stay alert for humps and hollows and other hidden hazards;
- never mow across the face of the slope, unless the machine is designed for this purpose.

Watch out for traffic when crossing or near roadways.

Stop the reel rotation before crossing surfaces other than grass.

Never direct discharge of material toward bystanders or allow anyone near the machine while in operation.

Never operate the lawnmower with defective guards, or without safety devices in place.

Do not change the engine governor setting or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.

Before leaving the operator's position,

- disengage the power take-off and lower the cutting units;
- shift into neutral and set the parking brake;
- stop the engine and remove the key.

Disengage drive to the cutting units, stop the engine, remove the ignition key, and disconnect the spark plug wire:

- before cleaning blockages or unclogging chute;
- before checking, cleaning, or working on the machine;
- after striking a foreign object. Inspect the lawn mower for damage and make repairs before restarting and operation the lawn mower;
- if lawn mower starts to vibrate abnormally (check immediately).

Disengage drive to attachments when transporting or not in use.

Stop the engine and disengage drive to attachment:

- before refuelling;
- before removing the grass catcher;
- before making height adjustment;
- before cleaning blockages;
- before checking, cleaning, or working on the mower;
- after striking a foreign object. Inspect the mower for damage and make repairs before restarting and operating the equipment.

Reduce the throttle setting during engine shutdown and turn the fuel off at the conclusion of mowing.

## 4. MAINTENANCE AND STORAGE

Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

Never store the equipment with fuel in the tank inside a building where fumes can reach an open flame or spark.

Allow the engine to cool before storing in any enclosure.

To reduce the fire hazard, keep the engine, silencer, battery compartment, and fuel storage area free of grass, leaves, or excessive grease.

Replace worn or damaged parts for safety.

If the fuel tank has to be drained, this should be done outdoors.

When machine is to be parked, stored, or left unattended, lower the cutting means unless a positive mechanical lock is used.

Be careful during adjustment of the machine to prevent entrapment of the fingers between moving blades and fixed parts of the machine.

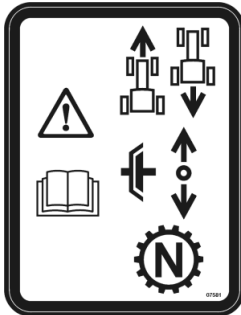
On multi-reel machines, take care as rotating one reel can cause other reels to rotate.

## CALIFORNIA SAFE OPERATING PRACTICES

Mowers used in California, USA are required by law (CA PRC 4442 & CA H & SC 13005) to have their engines equipped with spark arresters when operating in flammable vegetation. Arresters must be obtained from your engine dealer and are not available from National Mower Company.

# SAFETY AND CONTROL DECALS

Safety decals and instructions are located on the mower near the controls or near areas of potential hazards. Worn, damaged, or loose decals must be replaced. The decal part number and the location of the decal on the mower are listed next to each decal.



**07581 - MAIN ENGINE CLUTCH LEVER**  
(located on top surface of engine belt guard)

Move lever backward to put clutch in neutral position, forward to cause mower to travel (direction depends on differential shift position).

**WARNING** Engage the clutch slowly. Refer to instructions in the OPERATIONS section



**07584 – TRANSPORT CLUTCH PEDAL**  
(Model 68 DL)  
(located on top surface of engine belt guard)

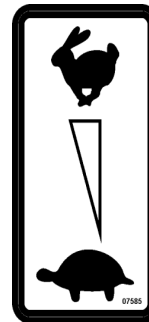
Pressing the pedal will cause the mower to run in high-speed transport mode. Operate the transport clutch by slowly pressing the pedal with your left foot. Releasing the pedal will cause the mower to coast to a stop, or resume mowing speed. Before using, disengage the cutting unit clutches and raise the cutting units to their transport position.

**WARNING** NEVER USE THE TRANSPORT CLUTCH WHILE THE CUTTING UNITS ARE TURNING, OR WHEN THE DIFFERENTIAL SHIFT IS IN REVERSE.



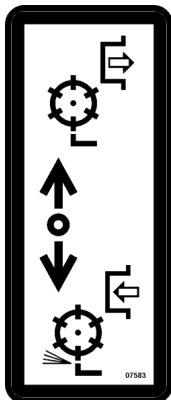
**07582 - DIFFERENTIAL SHIFT LEVER**  
(located on top edge of differential gear drive)

Move the shift lever and set it in the notch to place the differential into Forward, Neutral, or Reverse. NEVER SHIFT THE DIFFERENTIAL WITH THE MOWER IN MOTION OR THE MAIN ENGINE CLUTCH ENGAGED.



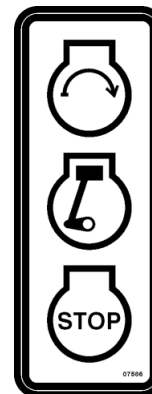
**07585 – ENGINE THROTTLE**  
(located on steering wheel)

Move the engine throttle lever forward for fast speed, backward for slow speed



**07583 – WING MOWER CLUTCH**  
(located on top surface of main belt guard)

Move the clutch lever back to engage the wing mower clutch. Move the lever forward to put the clutch in neutral.



**07586 – IGNITION KEY (Model 68 DL)**  
(located on instrument cluster panel)

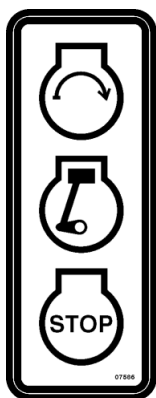
To start the engine, sit on the seat and place all cutting unit clutches in neutral. Turn the key to the full clockwise position to start the engine. Use the choke as required. Once the engine has started, release the key and allow it to rotate to the central run position.

To stop the engine, turn the key to the full counterclockwise position.

Refer to the engine manual for details on proper engine operation.

Disengage cutting unit clutches, engage the parking brake and remove the key whenever leaving the mower seat.

# SAFETY AND CONTROL DECALS



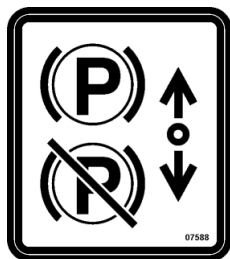
**07587 – IGNITION KEY** (Model 68 SR)  
(located on top surface of main belt guard)

To start the engine, place the main clutch and all cutting unit clutches in neutral. Turn the key to the clockwise position and pull on the recoil starter. Use the choke as required.

To stop the engine, turn the key to the full counterclockwise position.

Refer to the engine manual for details on proper engine operation.

Disengage cutting unit clutches, engage the parking brake and remove the key whenever leaving the mower seat.



**07588 – PARKING BRAKE LEVER**  
(located on top surface of main belt guard)

Move the parking brake lever forward to set the brake, rearward to release the brake. Driving the mower with the parking brake set will cause excess wear on the brake mechanism.



**07589 – SERVICE BRAKE PEDAL**  
(located on top surface of main belt guard)

Press the brake pedal with your right foot to stop the mower. You must also release the main engine clutch in order for the mower to come to a complete stop.



**07599 – WARNING DECAL**

(located on instrument cluster [68 DL] or main belt guard [68 SR])

Read and understand the information in the Owner's Manual before operating this mower.

Read and understand the information in the Owner's Manual before attempting to repair, service, or maintain this mower.

Turn off the mower engine, remove the ignition key, and disconnect the engine spark plug before

attempting to repair, service, or maintain this mower.

## WARNING

The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.

## WARNING

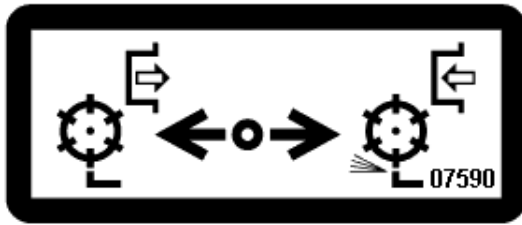
Objects may be thrown from the cutting units. Keep bystanders away from the mower.

## DANGER

Never allow the mower to freewheel down hills without the traction drive engaged. Serious injury or death can result from loss of control.

## WARNING

Do not operate the mower on slopes greater than 15 degrees.



**07590 – REAR CUTTING UNIT CLUTCH**  
(located on top surface of rear cutting unit)

Pull lever forward and toward the center of the machine to engage sliding jaw clutch.

To disengage, pull lever forward and out to engage locking pin.

Never engage the drive unless the rear cutting unit has been lowered to the cutting position.

(Note that the decal is viewed properly while looking toward the rear of the mower.)



**07595 – MANUFACTURER & SOUND LEVELS**  
(located on left side of main belt guard)

Guaranteed sound power level and manufacturer's information

**National 68DL**  
**National 68SR**

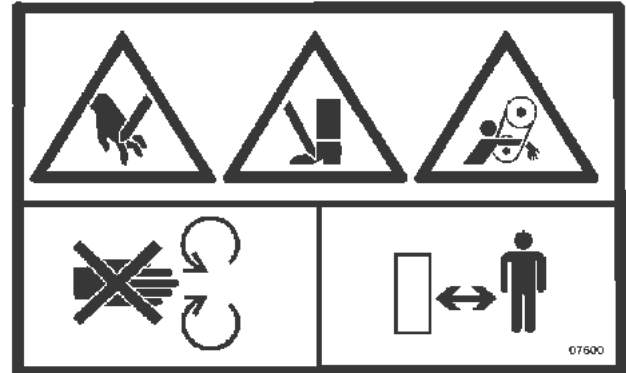
07415 – MODEL 68 DL LABEL (68 DL only)

07598 – MODEL 68 SR LABEL (68 SR only)

(located on left side of engine belt guard and right side of main belt guard)



**07083 – SERIAL NUMBER DATA PLATE**  
(located on mower frame, left side, below seat)



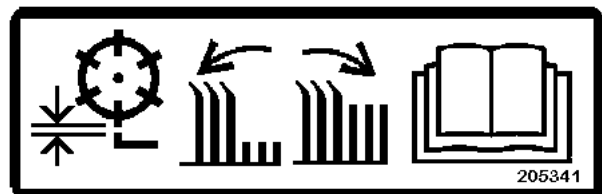
**07600 – CUTTING UNIT DANGER**  
(located on top surface of each cutting unit)

**DANGER**

Reels and bed knives on the cutting units are sharp. Keep hands and feet away from the cutting units.

**DANGER**

Do not attempt to work around the cutting units while they are running. Your fingers, hands, arms, or any loose clothing may become entangled in the belt drives. Do not operate the cutting units unless you are seated on the mower. Keep all guards and shields in place.



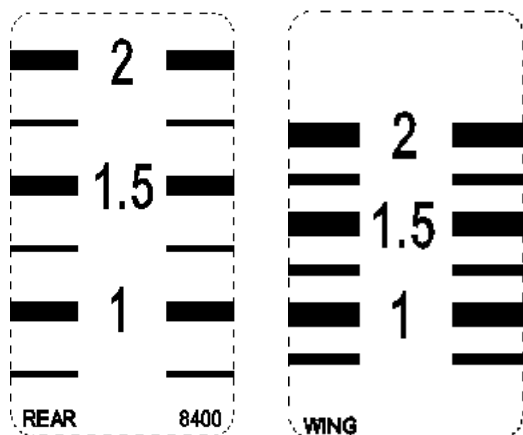
**205341 – INSTRUCTIONS for OPTIONAL DIAL-A-HEIGHT ADJUSTER**

(located on the top shield of each cutting unit)

Raise and turn the adjuster knob counterclockwise to lower the height of cut. Raise and turn the adjuster knob clockwise to raise the height of cut. Read the instructions for the Dial-A-Height adjusters in the Operations section of this manual.

## SAFETY AND CONTROL DECALS

---



205399 – Optional DIAL-A-HEIGHT SCALE (Rear cutting units)

205346 – Optional DIAL-A-HEIGHT SCALE (Wing cutting units)

(located on each Dial-A-Height bracket)

Align the bottom edge of the Dial-A-Height bracket with the desired height of cut on this decal. Read the instructions for the Dial-A-Height adjusters in the Operations section of this manual.

## RECEIPT OF SHIPMENT

Carefully inspect your machine and crate for damage that could have occurred during shipment. If damages or shortages are noted, have the transportation company's representative note this on the bill of lading.

Note: Claims for shipping damages must be noted by the consignee at the point of destination and filed with the transportation company that delivers the shipment.

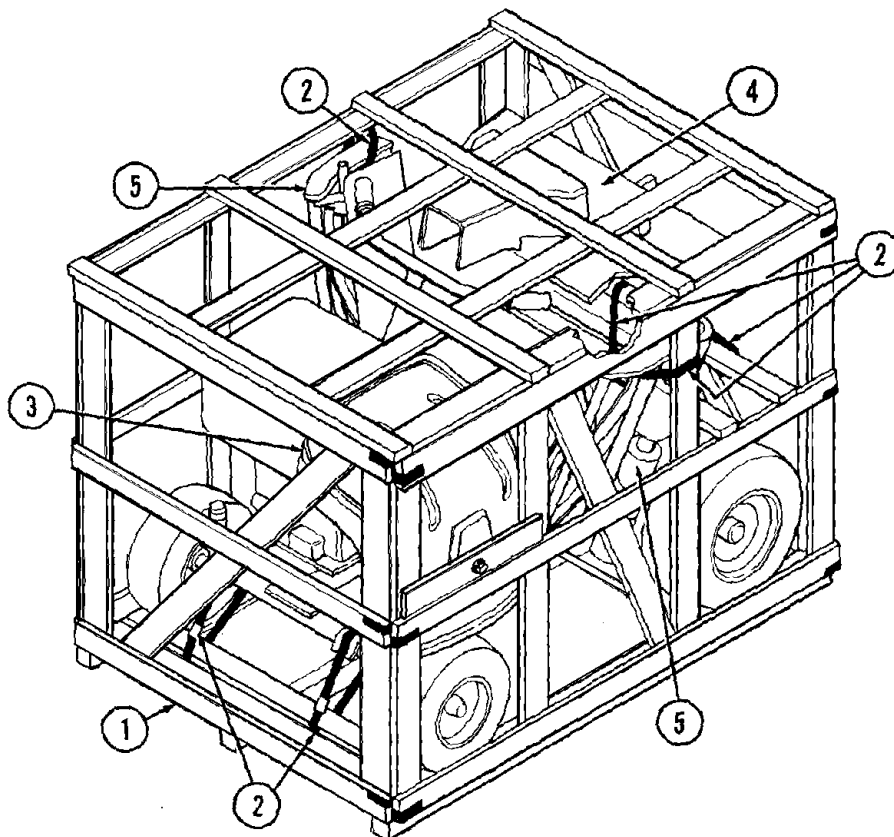
## UNCRATING INSTRUCTIONS

### CAUTION

Wear protective gloves. Steel banding is sharp. Handle cutting units carefully. Reels rotate freely and are very sharp.

In order to prevent possible damage to the machine or personal injury, the following uncrating procedure must be followed:

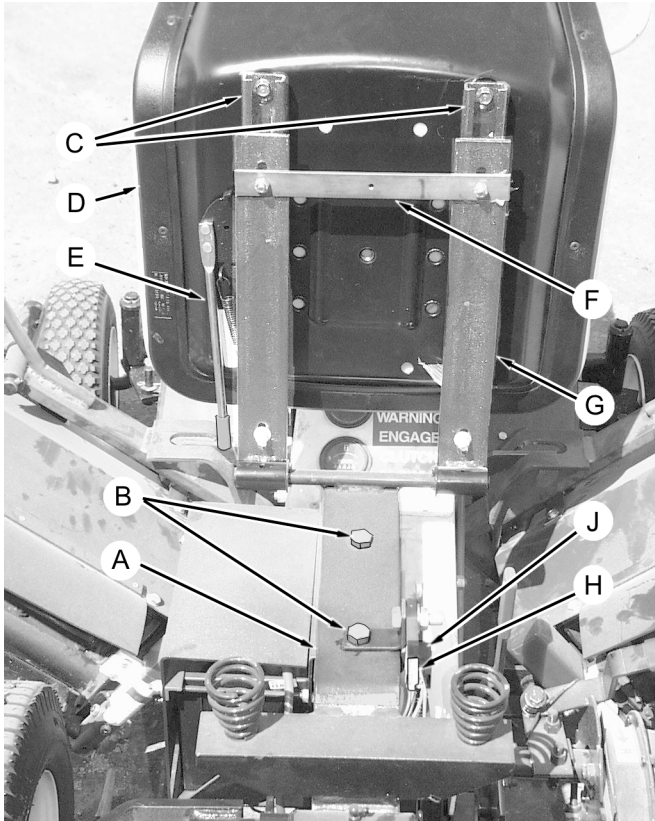
1. Position Crate (1) on a hard, level surface.
2. Cut and remove all Steel Banding (2). Remove the entire top of the crate.
3. Unbolt Seat (3) from crate bracing and lay seat aside for installation later.
4. Lift Rear Cutting Unit (4) off the crate supporting members and set aside for later attachment.
5. Make sure Wing Cutting Units (5) are in their upright positions, secured to the mower frame with Wing Cutting Unit Latches.
6. Knock down all sides of crate and remove. Roll mower backwards off of crate base.



# ASSEMBLY

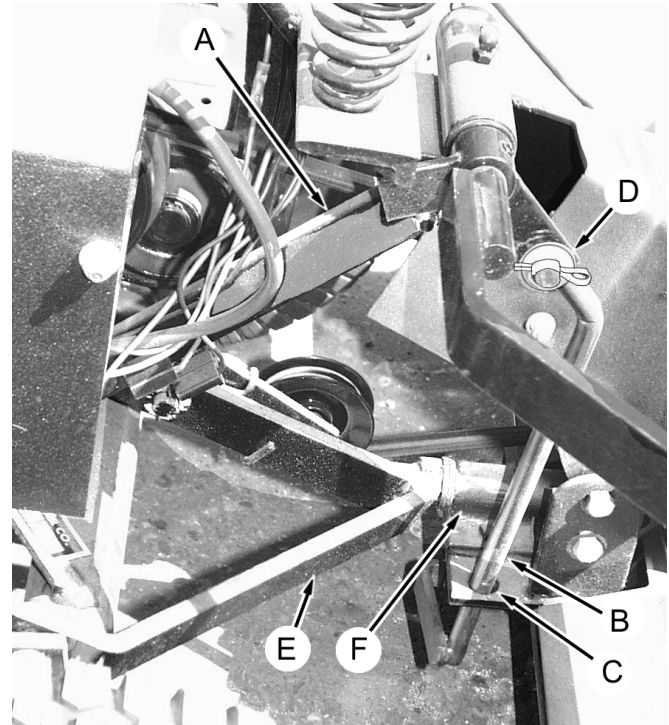
## WARNING

Improper assembly or adjustments can cause serious injury.



### SEAT

1. Mount the Rear Cutting Unit Lifter and Seat Assembly (A) to the mower frame using (2) 1/2" bolts, nuts, and washers (B).
2. Fasten the seat slides (C) to the bottom of the seat (D) using the fasteners provided with the slider mechanisms. Orient the slider so the adjuster lever (E) is on the operator's left hand side.
3. Remove the seat switch bracket (F, 1" x 10" bar)) mounted near the ends of the legs of the seat hinge. Discard the fasteners. Mount the seat and slider assembly onto the seat hinge (G). Replace the seat switch bracket and tighten fasteners. Plug the wire harness socket (H) into the seat safety switch (J). Use care in routing the wires so that they are not pinched by the switch lever or seat support mechanisms.

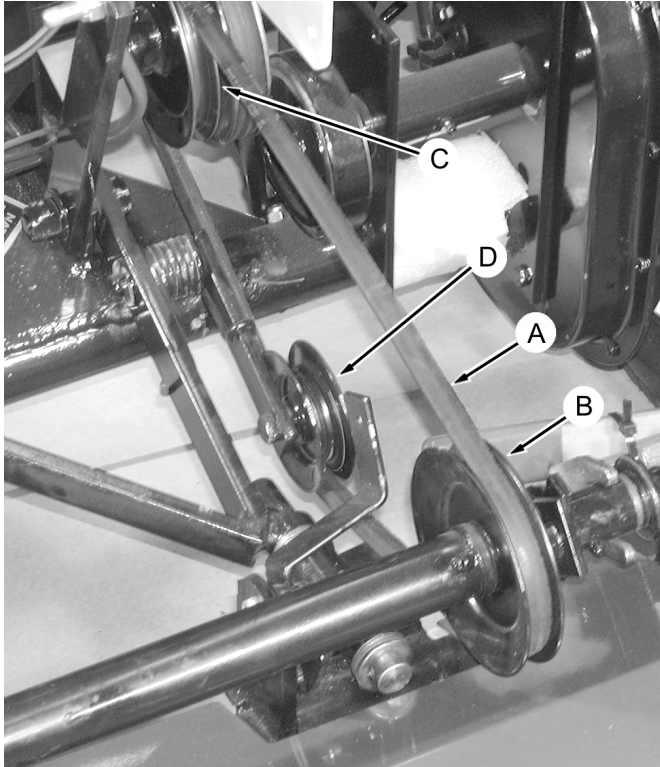


### REAR CUTTING UNIT

1. Pivot the Seat Brace (A) from the axle so that the top end aligns with the tab at the back of the seat hinge assembly. Fasten with a 5/16" x 1" Hex Head Bolt, Lock Washer and Hex Nut.
2. Slide the rod end of the lifter tee (B) through the hole (C) in the pad on the rear mower frame and secure it to the lift arm pivot with the cotter pin and washer as shown at (D).
3. Attach the Pull Rod (E) to the cutting unit Pivot Tube (F) with Pin and Spacers.

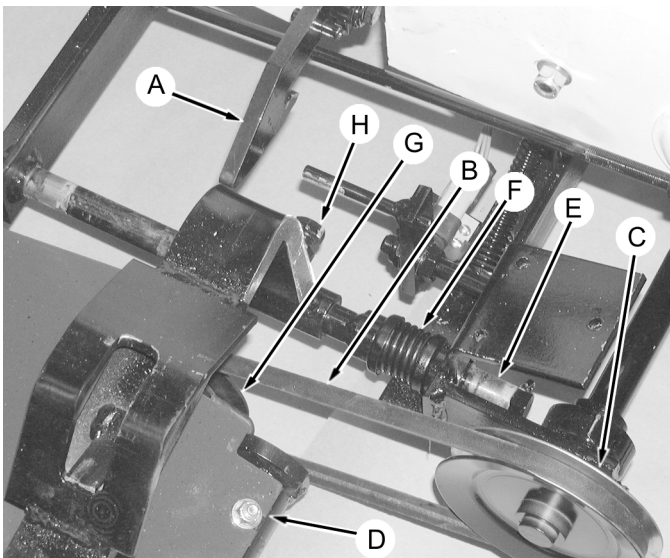
NOTE: Before completing assembly, it will be necessary to adjust the drive belt tension. See "Rear Cutting Unit Drive Belt Tension" in the Maintenance section of this manual, page 23.





### REAR CUTTING UNIT BELT

Install Rear Cutting Unit Belt (A) from Countershaft Pulley (B) to outer Drive Pulley (C). Idler Pulley (D) must ride on top of lower belt to provide proper tension. NOTE: It will be necessary to raise rear cutting unit to allow enough slack to get belt over pulleys.



### WING CUTTING UNITS

1. Remove the two Wing Cutting Unit Belts from the steering column.
2. Release the Latches (A) from Wing Cutting Units. To release the latch, lift the wing cutting unit handle until the latch swings upward into a nearly vertical position. Carefully lower the cutting unit to the ground. Avoid dropping the cutting unit, as damage may result to the cutting unit, the mower, or your turf.
3. Slip wing Cutting Unit belts (B) over Countershaft Pulleys (C).
4. Block mower wheels to prevent mower from moving forward. Pull Wing Cutting Units (D) forward so that they slide on Pull Rods (E) and compress springs (F). This will allow enough slack to enable belts to be installed over Reel Pulleys (G).
5. Pull Cutting Units backwards to adjust belt tension. Tighten bolt (H) to lock in place.

### REEL TO BED KNIFE ADJUSTMENT

To prevent damage during shipment, the reels have been moved away from the bed knives at the factory. Follow the procedure for "Reel to Bed Knife Adjustment" in the Maintenance section of this manual to properly adjust your cutting units.

### ENGINE

#### CAUTION

MOWER IS SHIPPED WITH DRY ENGINE. DO NOT START ENGINE UNTIL OIL IS ADDED TO CRANKCASE. See Engine Manual for additional information.

### DIFFERENTIAL

Grease has been installed in the differential at the factory. For additional information, refer to the Maintenance section of this manual.

# PREPARATION

---

## DANGER

Handle cutting units carefully with protective gloves. Reels and bed knives are very sharp. Reels rotate freely and rotating one reel can cause other reels to rotate.

## CAUTION

Moving machinery can be dangerous if not operated properly. Follow all safe operating suggestions listed in the Safety Information section of this manual.

Check the following items before each use of the mower.

**TIRE PRESSURE** - Use a tire pressure gage to check the tire pressure. Fill tires with compressed air as needed to obtain the pressure labelled on the sidewall of the tire.

**ENGINE OIL** - Check level on dipstick. Refer to the engine manual for instructions on adding oil and which oil viscosity to use.

**FUEL** - Check fuel level. Add fuel as required. Refer to the engine manual for type of fuel and other safety requirements.

**ENGINE COOLING** - Keep engine cowlings clear of clippings.

**LUBRICATION** - Add lubricant to pivots and other lubrication points as required. Refer to the lubrication chart in the Maintenance section of this manual.

**REELS CLEAR OF DEBRIS** - Remove any debris that may be tangled in the cutting reels. Keep the reel shaft and bearing clean of grass or other debris buildup.

**SAFETY SWITCH OPERATION** - Check operation of all safety switches. Do not use mower if safety switches are disconnected or not operational, as dangerous conditions will result.

# OPERATION

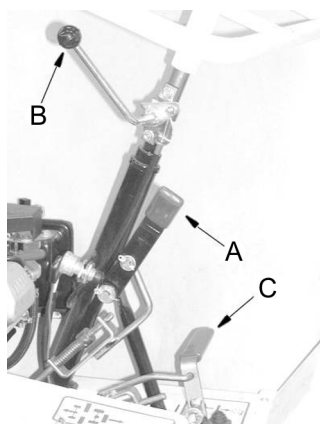
---

The following is a description of the machine controls and their function.

## A. Main Clutch Lever

### WARNING

Engage slowly before full engagement. Always disengage the drive when stopping or leaving the machine.



Engages power for travel and mowing. Down position is disengaged and up position is engaged.

The engine clutch lever has an electrical interlock and engine will not start if clutch is engaged. For added safety, the interlock system should be checked periodically to ensure that it is adjusted to function properly.

**B. Engine Throttle Lever** – Regulates mowing and travel speeds. Moving the control handle back will reduce engine speed for starting and idling engine. Push forward to increase engine speed. Never travel at speeds faster than required for proper mowing.

**C. Wing Cutting Unit Clutch Lever** – Engages drive to **Wing Cutting Units**. Pull lever back and down to engage. Never engage drive unless **Wing Cutting Units** have been lowered to cutting position.

**Engine Choke Lever (No photo)** - Located near the upper rear right corner of the engine. Use the choke when starting a cold engine. See the engine manual for engine starting information and proper use of the choke.

# OPERATION

## D. Transport Clutch (Model 68 DL only)

**WARNING** NEVER USE THE TRANSPORT CLUTCH WHILE THE CUTTING UNITS ARE TURNING OR WHEN THE DIFFERENTIAL SHIFT IS IN REVERSE.



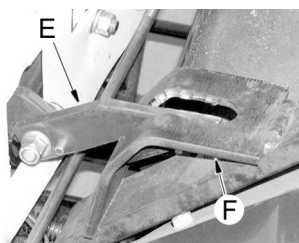
Use this clutch to travel between mowing sites at speeds faster than those obtained with the main clutch. Before using, disengage the cutting unit clutches and raise the cutting units to their transport position.

Operate the transport clutch by slowly pressing the pedal with your left foot. Releasing the pedal will cause the mower to coast to a stop, or resume mowing speed.

## E. Wing Cutting Unit Latch

**WARNING** NEVER ATTEMPT TO RAISE THE WING CUTTING UNITS WHEN THE WING MOWER CLUTCH IS ENGAGED.

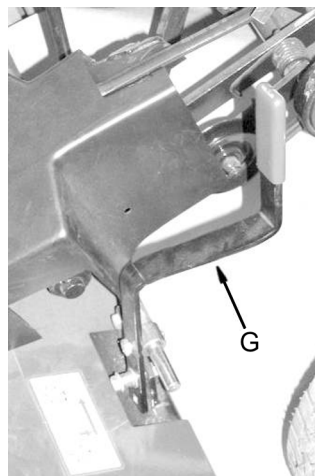
The Wing Cutting Units should be latched in their elevated position whenever the mower is being transported or in storage.



If needed, push the latch (E) down to a generally horizontal position. Grasp the **Wing Cutting Unit** lift handle (not shown) and raise the cutting unit until the latch (E) engages the lift arm socket (F).

To release the latch, lift the handle until the latch (E) swings upward into a nearly vertical position, then carefully lower the cutting unit onto the ground. Avoid dropping the cutting unit, as damage may result to the cutting unit, the mower, or your turf.

## G. Rear Cutting Unit Clutch



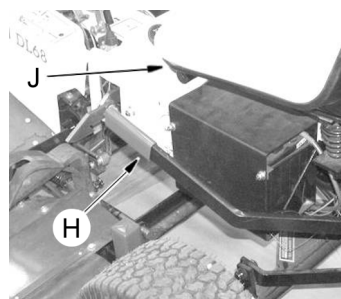
Engages drive to the Rear Cutting Unit.

Pull lever forward and toward the center of the machine to engage sliding jaw clutch.

To disengage, pull lever forward and out to engage locking pin.

Never engage the drive unless the rear cutting unit has been lowered to the cutting position.

## H. Rear Cutting Unit Lift Arm



Raises rear mower to the transport position. Pull handle up, forward and over center to lock it in the up position.

## J. Seat Position Adjuster Lever

**WARNING** DO NOT OPERATE THE SEAT SLIDE MECHANISM WHILE THE MOWER IS MOVING

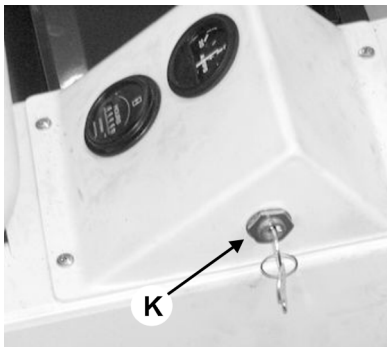
The seat may be moved forward or backward to suit the operator. Pull the lever near the front left corner of the seat outward to release the slide mechanism. After moving the seat to a comfortable position, release the lever to lock the slide mechanism.

# OPERATION

## K. Ignition Switch (Model 68 DL shown)

### CAUTION

ALWAYS SHUT OFF THE ENGINE AND REMOVE THE KEY BEFORE LEAVING THE MOWER SEAT.



The **68 DL** ignition switch is located on the instrument cluster. It is a three-position switch.

Turn the key clockwise to the middle position to activate the electrical system. Turn the key to the full clockwise position to start the

engine. Turn the switch counterclockwise to shut off the engine.

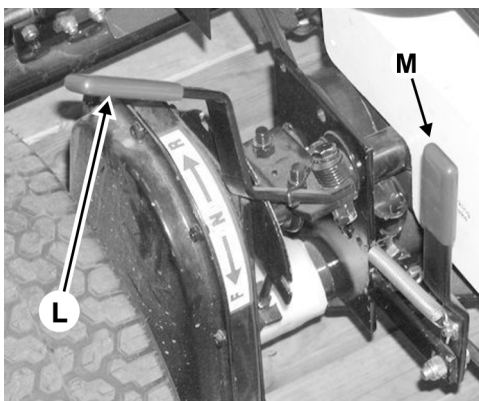
The **68 SR** ignition switch (not shown) is located on the steering column. It is a two-position switch.

Turn the key clockwise to activate the electrical system and allow the engine to be started. Turn the switch counterclockwise to shut off the engine.

## L. Differential Shift Lever

### WARNING

Never shift while machine is in motion, as damage to the gears could result. Always disengage engine clutch before attempting to shift.

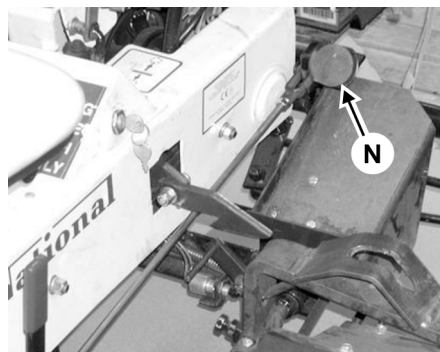


Located on the mower differential, this control has three positions: Forward, Neutral (center position), and Reverse. The lever must be pulled toward the cen-

ter of the machine to clear the notch in the stop disc and positioned securely in the new notch.

## M. Parking Brake Lever

Provides a lock for the brake. Push brake lever forward, over center, to lock. Pulling brake lever back, toward the rear of the machine will disengage the brake.



## N. Service Brake

Depress the Service Brake foot pedal to slow the mower and lock the rear wheels in the full stop position.

Note: It is best to slow the mower

with the throttle and then disengage clutch lever before applying brake. This prevents excessive wear and engine overload.

## SAFETY SWITCHES

Your National 68 mower is equipped with safety switches to monitor the operating conditions of certain machine functions and stop the mower whenever unsafe conditions are found.

It is necessary for both the main engine clutch and the wing cutting unit clutch to be in their neutral position to start the engine. The 68 DL also requires the operator be in the seat. The 68 SR does not require the operator to be in the seat to facilitate use of the hand recoil starter.

If you encounter difficulties starting the mower's engine, or keeping it running, check the chart in the Safety Switches section of this manual to make sure you are not causing the engine to kill or become unable to start.

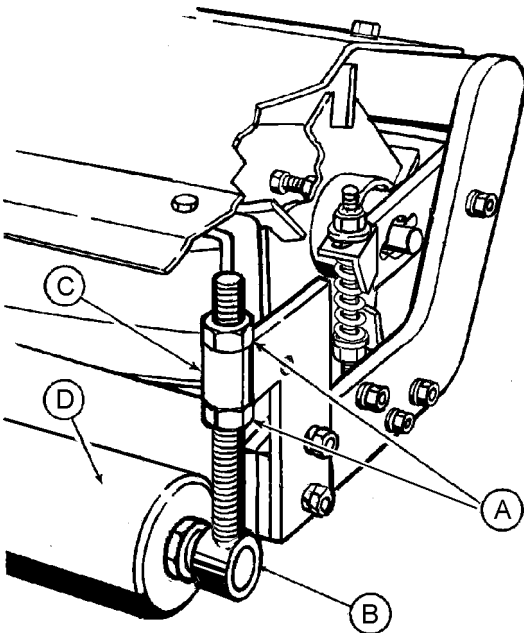
## HEIGHT OF CUT ADJUSTMENT

**DANGER** To assure safety, disengage the engine clutch lever, remove the ignition key, and disconnect the engine spark plug wire prior to making any of the following adjustments.

### 1. STANDARD ADJUSTERS

The height of cut is variable and may be adjusted on both wing cutting units and the rear cutting unit by loosening the top and bottom Adjusting Nuts (A) which hold Roller Adjusters (B) in Roller Brackets (C). Roller (D) may then be moved up and down.

It is important to get all rollers adjusted to the same height so that there will be uniform cutting across the entire width of the cutting unit. Do not adjust by sight. Place the mower on a hard, level surface and place a board or gauge plate of the desired height under each bed knife back bar. Allow the rear roller to rest on the level surface. Retighten the adjusting nuts and remove the gauge plate or board.



**STANDARD HEIGHT ADJUSTER**

NOTE: Guards removed or cut away to show detail

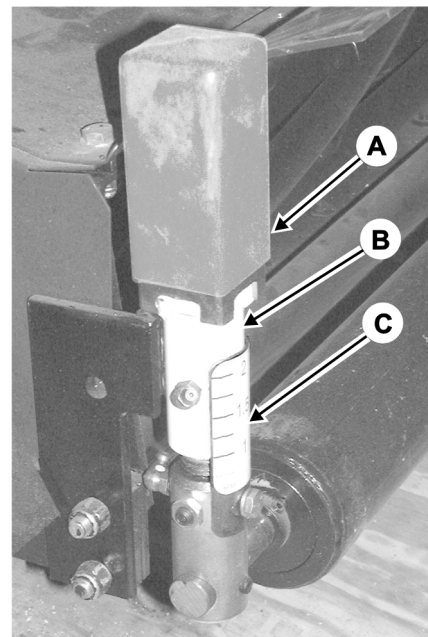
### 2. DIAL-A-HEIGHT ADJUSTERS (OPTIONAL)

To set the height of cut, lift the vinyl cap and socket (A) off the adjuster tube. To raise the height of cut, turn the socket clockwise (viewed from above). To lower the height of cut, turn the socket counterclockwise. Each quarter turn (90°) of the socket will raise or lower the height of cut by approximately 1/32". A full turn (360°) will raise or lower the height of cut approximately 1/8".

When making large adjustments (over 1/2"), make small adjustments to each side until the desired change is reached. When the desired height is achieved, lower the socket and make sure the adjuster tube locks it in position.

The scale decal (C) on the rear side of the adjuster indicates the height of cut. To use it, sight along the bottom edge of the adjuster tube (B). The reading on the scale is your approximate height of cut.

You should determine the exact settings by test mowing your turf. If very accurate cutting heights are required, place the cutting units on a hard, level surface and place a board or other gauge plate of the desired height under each bed knife backing bar. Lower the rollers to the level surface. When completed, make sure the socket is locked in position over the adjuster tube.



**DIAL-A-HEIGHT ADJUSTER (OPTIONAL)**

### OTHER ADJUSTMENTS

For other machine adjustments, see the Maintenance section of this manual.

# MAINTENANCE

## LUBRICATION

Lubricate the machine at the recommended locations and intervals using the proper lubricants to ensure maximum service and long life of your machine.

Lubrication locations must be free of dirt and grass clippings and be well lubricated for proper operation.

The location and number of all lubricating points are listed in the chart below. The type and frequency of lubrication is specified. Use the following photos to locate the lubrication points on the mower.

### DIFFERENTIAL

Since the mower does not operate at high speeds, the grease level in the differential is not critical providing that there is sufficient grease to coat the gears. Unless

leakage is evident, it is recommended that the grease be checked once each year. Check grease level by loosening the bolts in the differential case flanges and spreading case halves. It is not necessary to totally disassemble the case or remove the wheels for this inspection. Add Multi-purpose Gear Grease such as Pennzoil No. 303 or equivalent if necessary. Total grease capacity is 1-1/2 pounds (0.68 kg).

### CAUTION

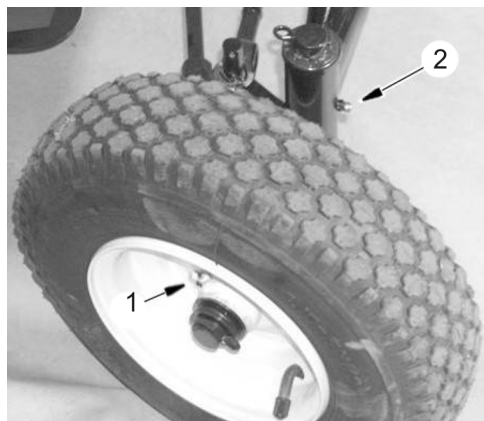
Do not use oil in the differential case in place of grease—it will leak through the seals.

### ENGINE

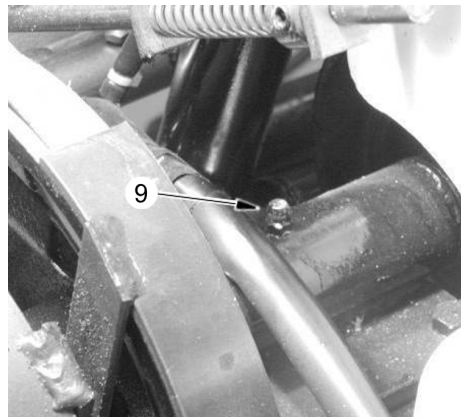
Refer to the engine manual (separately furnished) for proper lubrication and maintenance instructions.

ITEM	LOCATION AND NUMBER	TYPE	FREQUENCY
1	Front wheel bearings (2)	Grease	Daily
2	Steering kingpin (2)	Grease	25 hours
3	Front axle to frame pivot (2)	Grease	25 hours
4	Steering column (2)	Grease	25 hours
5	Brake pedal pivot (1)	Oil	Daily
6	Idler pivot bracket (1 - 68 DL only)	Grease	25 hours
7	Main engine clutch handle (1)	Oil	Daily
8	Wing mower clutch handle (1)	Oil	Daily
9	Upper countershaft (1)	Grease	Daily
10	Lower countershaft (1)	Grease	Daily
11	Wing mower pull rods (4)	Grease	Daily or as required
12	Rear axle (2)	Grease	25 hours
13	Input-shift tube (1)	Grease	25 hours
14	Brake drum tube (1)	Grease	25 hours
15	Main axle tube (1)	Grease	25 hours
16	Seat hinge (2)	Grease	Daily
17	Rear mower lift arm pivot (1)	Grease	25 hours
18	Rear mower pivot tube (1)	Grease	25 hours
19	Rear mower countershaft (2)	Grease	Daily
20	Rear mower clutch (2)	Grease	Daily
21	Wing mower lift arm pin (4)	Grease	25 hours
22	Cutting reel bearings (6)	Grease	Daily
23	Height of cutter adjuster threaded shaft (6)	Grease	Yearly or as required
24	Threaded shaft and bracket (6)	Grease	Yearly or as required
25	Swivel block (6)	Grease	Yearly or as required
26	Belt clutch idler arm (68 DL only)	Grease	Daily
27	Transport clutch foot pedal (68 DL only)	Grease	Daily

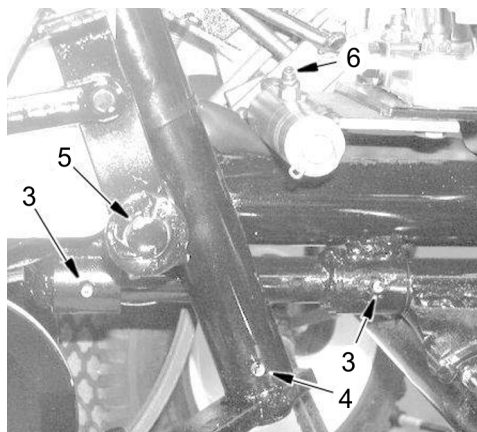
## LUBRICATION POINTS



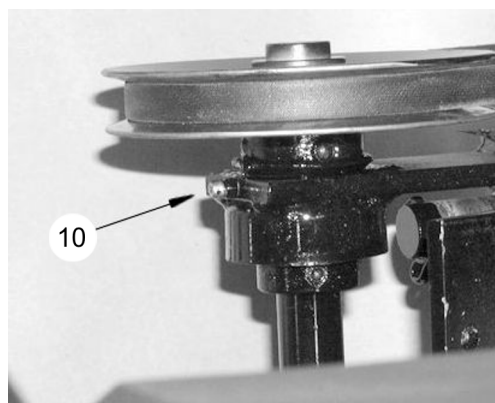
- 1. Front wheel bearing
- 2. Steering Kingpin



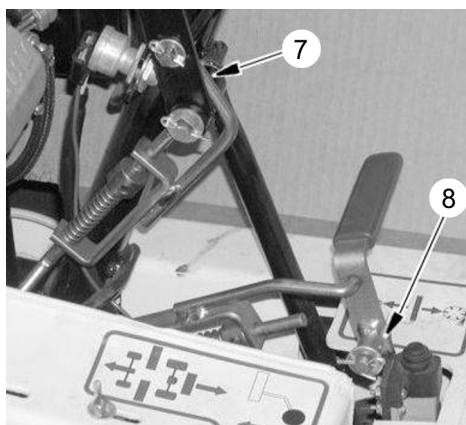
- 9. Upper countershaft



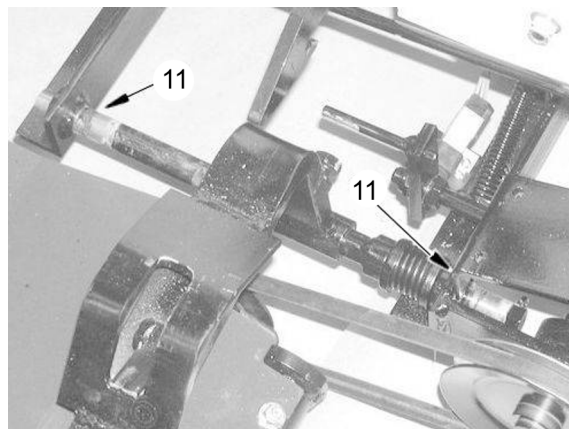
- 3. Front axle pivot
- 4. Steering column (2 places)
- 5. Brake pedal pivot
- 6. Idler pivot bracket (68 DL only)



- 10. Lower countershaft



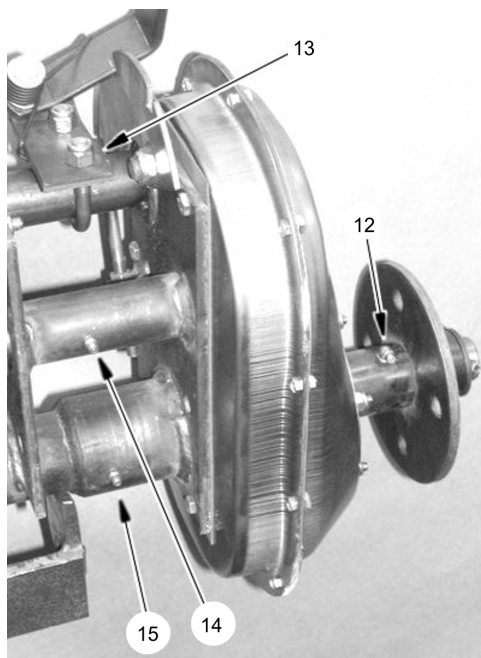
- 7. Main clutch handle
- 8. Wing mower clutch handle



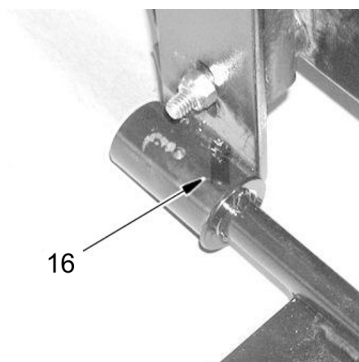
- 11. Wing mower pull rod (2 places)

# MAINTENANCE

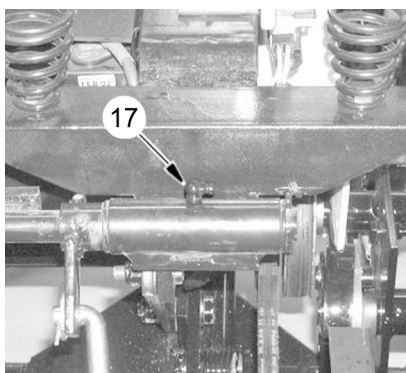
## LUBRICATION POINTS



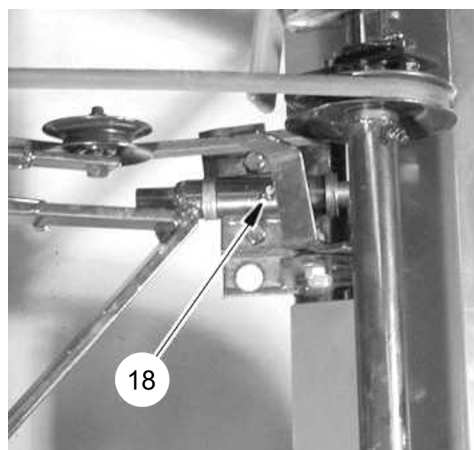
- 12. Rear axle (2 places)
- 13. Differential input tube
- 14. Brake drum tube
- 15. Main axle tube



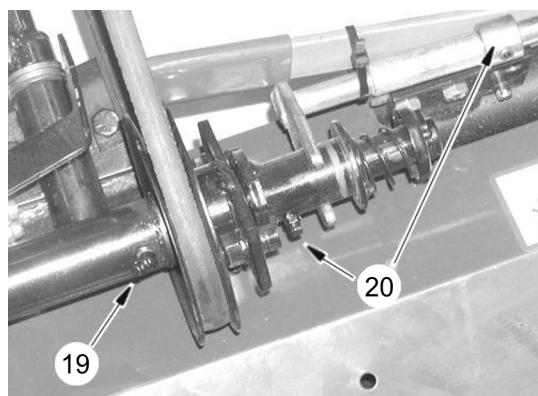
16. Seat Hinge



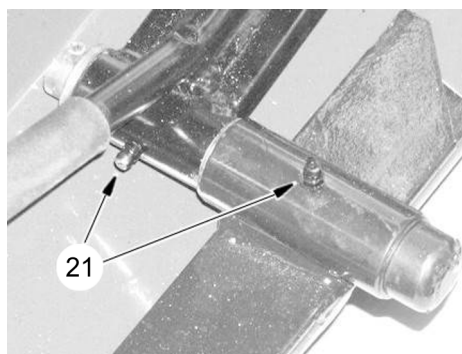
17. Rear mower lift arm pivot



18. Rear mower pivot tube



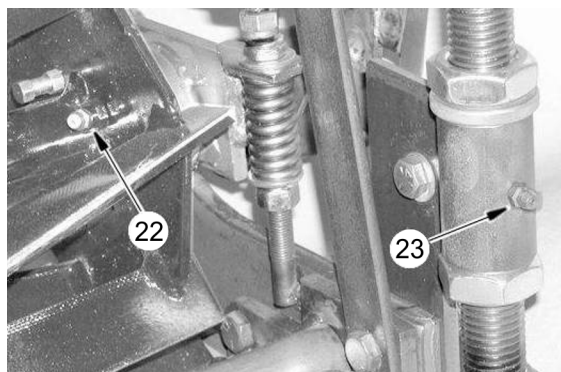
- 19. Rear mower countershaft (2 places)
- 20. Rear mower clutch



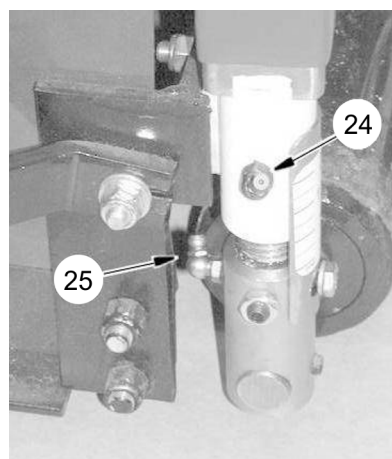
21. Wing mower lift arm (2 places)



## LUBRICATION POINTS

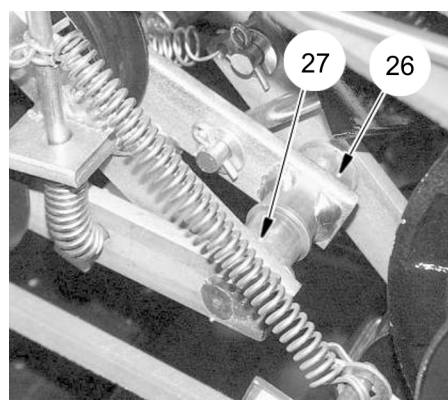


- 22. Cutting reel bearing (6 places)
- 23. Height of cut adjuster (6 places)



Dial-A-Height adjusters (optional)

- 24. Threaded shaft (6 places)
- 25. Swivel block (6 places)



Belt clutch arm pivot arms (68 DL only)

- 26. Belt clutch idler arm
- 27. Transport clutch foot pedal

# MAINTENANCE

## **DANGER**

To assure safety, disengage the engine clutch lever, remove the ignition key, and disconnect the engine spark plug wire prior to making any of the following adjustments.

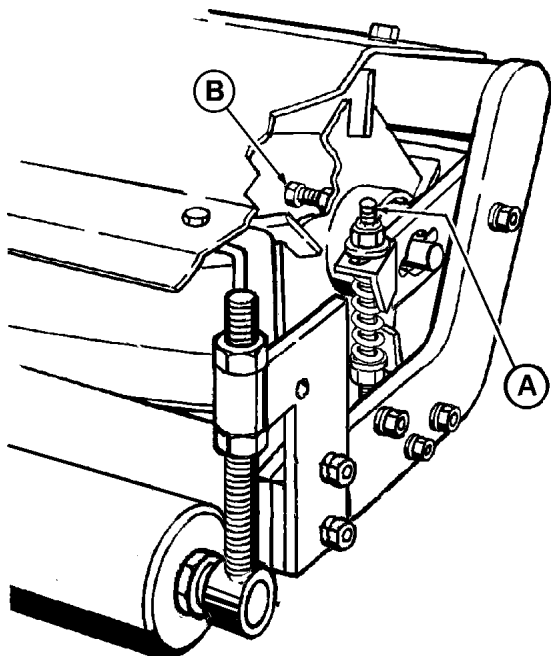
## **DANGER**

Handle reel assemblies carefully with protective gloves. Reels are very sharp. Reels rotate freely and rotating one reel can cause other reels to rotate. Special care should be taken in the area where the reel contacts the bed knife.

### **REEL TO BED KNIFE ADJUSTMENT**

The reel is adjusted to a fixed position bed knife. This construction allows a more rugged and durable frame and retains the proper adjustment longer. The Reel Adjuster Bolt (A) regulates reel distance from the bed knife.

To reduce the distance, turn the upper hex adjuster nut on each side of the reel down. Proceed slowly and do not over-adjust -- use about 1/8 of a turn on each side at first.



### **REEL ADJUSTMENTS**

NOTE: Guards removed or cut away to show detail

Do not adjust one side more than the other unless the reel is obviously out of alignment. Do not get the reel so tight that it is hard to turn by hand. A too tight reel will wear faster.

Ideally, the reel should "wipe" or lightly touch the bed knife. It is not necessary to adjust or change the position of the lower adjustment nut.

Proper cutting action may be tested by holding paper strips between the reel and the bed knife. Turn the reel by hand and check to see if the assembly cuts the paper all the way across the width of the bed knife. Make sure that the adjusting and the locking nuts on both side are tightened securely.

### **REEL END PLAY ADJUSTMENT**

Test for end play periodically by trying to move the reel from side to side in the frame. If there is ANY movement, adjust the bearings by loosening the lock nut on the adjustment bolt (B) which is located on the inside right end of the reels, and turning the adjustment bolt IN one half turn or less. Do not overtighten. An overtightened bearing will cause excessive bearing wear. Test again for end play and if reel is rotating freely and end play is not noticeable, tighten the lock nut.

### **HEIGHT OF CUT ADJUSTMENT**

Refer to "Height of Cut Adjustment" in the Operation section of this manual.

### **BRAKE ADJUSTMENT**

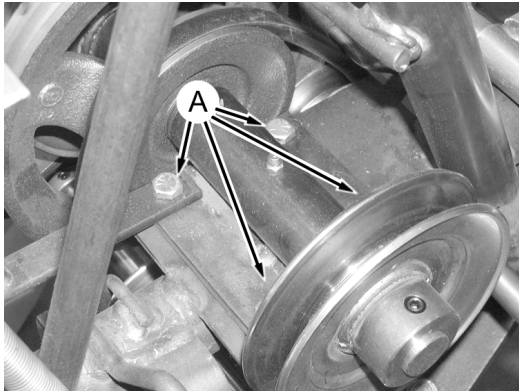
The foot brake is properly adjusted if it slows the machine when depressed and can be locked when the pedal is depressed fully.

Adjust brake tension by removing cotter pin and brake pedal pin and turning brake clevis located under pedal on brake rod. When adjustment is complete, attach clevis to pedal with pin and cotter pin.

### ADJUSTING DRIVE BELT TENSION

A belt adjusted for proper tension can be deflected slightly at a point midway between the pulleys. An over-tight belt will cause excessive bearing wear and an under-tight belt allows slipping, causing excessive belt wear.

**IMPORTANT:** Never allow oil to get on the belt which could cause slipping.



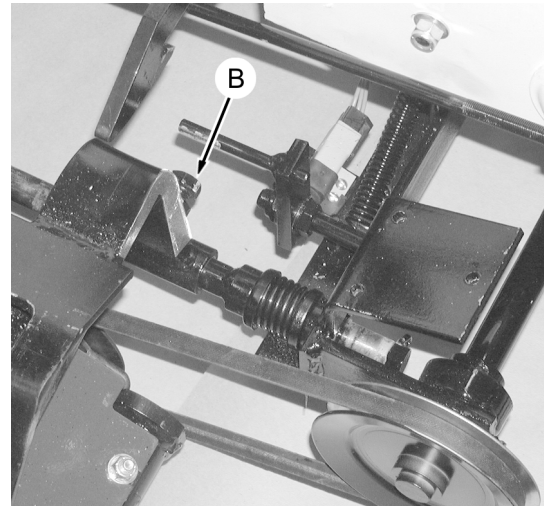
### MAIN DRIVE BELT TENSION (Main Countershaft to Rear Drive)

Belt tension is increased by loosening the four bolts holding the Upper Countershaft Housing (A) and sliding the housing forward in the slotted frame holes.

**NOTE** - It will be necessary to remove belt guards to reach the adjustment bolts. Also, if this belt is adjusted, it will be necessary to readjust the engine belt. Replace all belt guards before using the mower.

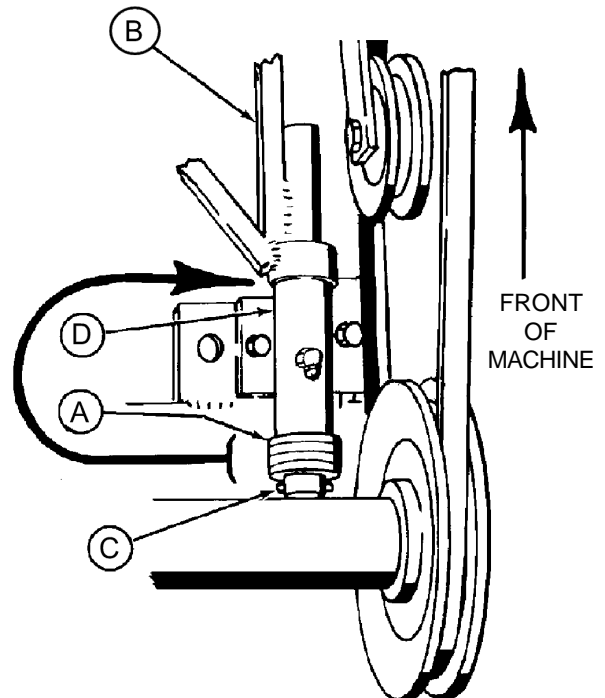
### ENGINE DRIVE BELT TENSION (Engine to Main Countershaft) (No photo)

Belt tension is increased by loosening the four engine mounting bolts and sliding the engine forward in the slotted frame holes. Test for the proper tension as detailed in the section "Wing Cutting Unit Drive Belt Tension". When tension is correct, tighten all the bolts securely.



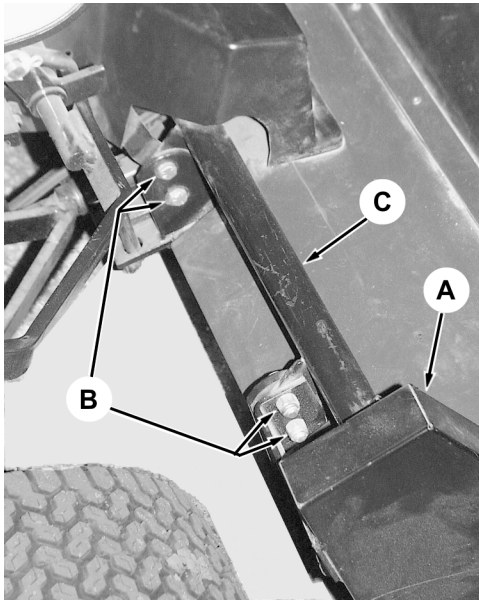
### WING CUTTING UNIT DRIVE BELT TENSION

Adjust tension by loosening set screw (B) in the wing mower pull arm, sliding the Cutting Unit rearward and retightening set screw.



### REAR CUTTING UNIT DRIVE BELT TENSION

Spacers (A) are provided on the rear mower Pull Rod (B) to adjust the belt tension. Remove Pin (C) from the end of the pull rod and slip out the pull rod from the Pivot Tube (D). Move as many spacers as necessary to the location indicated and reassemble.

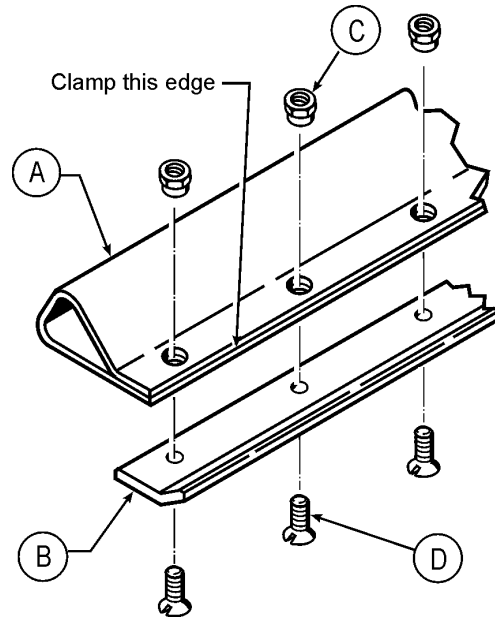


## REAR CUTTING UNIT CHAIN TENSION

A chain drive is located on the left side of the rear cutting unit. It may be helpful to remove the Chain Shield (A) prior to adjusting the chain tension.

Adjust the tension of the chain by loosening the 4 bolts (B) on the rear cutting unit countershaft housing. Rotate the countershaft housing (C) about the pivot line created by the fixed bolts. The slots on the countershaft housing will slide over the remaining two bolts. Rotate the countershaft housing until proper chain tension is achieved. Tighten bolts.

Proper tension is achieved when the chain is slightly loose, but does not deflect more than 1/2" when pressed in the middle of the span between the two sprockets.



## BED KNIFE REPLACEMENT

### **DANGER**

Reels and bed knife are sharp. Wear gloves to avoid cutting fingers on sharp edges. Wear safety glasses to protect eyes.

When the bed knife becomes damaged or too worn to keep sharp, it must be replaced. Follow the procedure below.

1. The backbar (A), bed knife (B) and fasteners (C,D) have been assembled at the factory under tension. To ease replacement and prevent misalignment of components, you may wish to clamp the leading edge of the backbar in two or three places before removing the old fasteners.
2. Remove the old shoulder nuts (C) and flat head screws (D). If shoulder nuts are badly rusted or corroded, they may have to be cut off and screws driven out to be removed.
3. Clean the bottom surface of the backbar for maximum metal contact with the new bed bar.
4. Fasten the new bed knife to the bottom of the backbar in the position shown (bent edge up). Shoulder of shoulder nuts (C) must be seated firmly in the backbar and screws (D) must be flush with the bottom of the bed knife.
5. Torque shoulder nuts 35 to 40 ft-lbs.

## BACK LAPPING PROCEDURE

### **DANGER**

Be extremely careful not to let the brush, your fingers or your clothing get caught in the reels. Wear gloves to avoid cutting fingers on sharp edges. Wear approved safety glasses to protect your eyes from flying particles and abrasives.

### INTRODUCTION

Back lapping is a very important step in maintaining sharp reel blades on the cutting units.

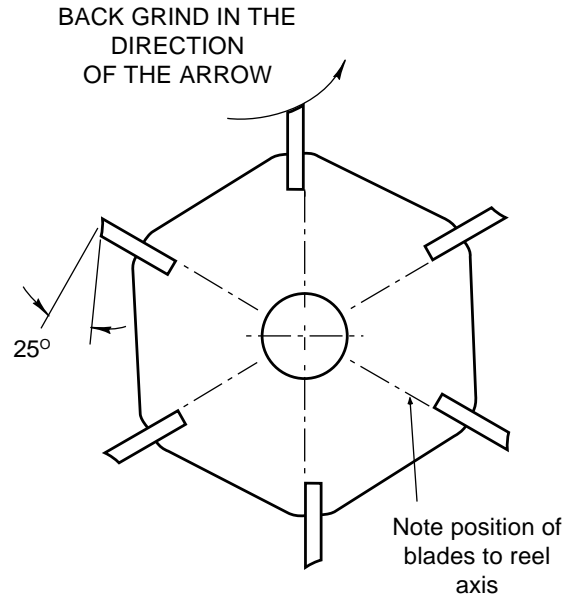
This procedure should be performed when the reel blades and the bed knife become slightly rounded and the grass is not cut cleanly with only a slight reel to bed knife adjustment. Also, after grinding the bed knife and reels, you should back lap to establish a perfect match between the bed knife and reel blades.

### RECOMMENDED STEPS

1. Adjust the reel to the bed knife so that the bed knife is parallel to the reel and light contact is maintained.
2. Reels must be run in a reverse direction to be lapped. Remove the lower drive belts and attach a back lapping machine (not supplied by National Mower) to the reels. Follow the instructions furnished by the machine manufacturer.
3. Apply the lapping compound with the reels running, using a 2" or a 3" (5 - 7.5 cm) brush. Apply the compound evenly to the moving blades.

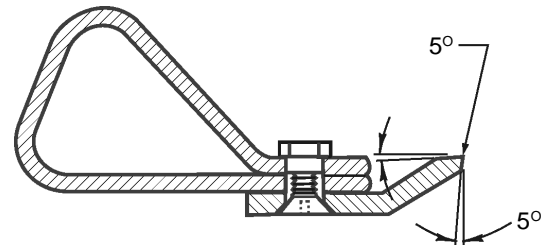
Many types of compounds are available for lapping. We recommend a good pre-mixed water soluble compound. Pre-mixed compound saves the time required to mix, eliminates the waste of abrasive, rinses off easily with water and is available in all grit ranges from coarse to extra fine.

4. Stop the reel and examine both bed knife and reel blades to see that the cutting edges are uniformly sharp. If not, gradually tighten the reel adjuster bolts (see "Reel to Bed Knife Adjustment" above) and repeat Step 3 until the proper sharpness results.
5. Rinse off the compound thoroughly with water to remove all abrasive. Check for sharpness and readjust the bed knife if necessary. Reel to bed knife contact should be adjusted to easily cut a sheet of paper (see "Reel to Bed Knife Adjustment" above).



### GRINDING REELS

Reels must be ground at 25° in the direction shown by the arrow in the figure. Back grind until reel blades are free from roundness, dents and nicks. Spin grind to remove all burrs. All blades must be on the same diameter.



### GRINDING BED KNIVES

For maximum cutting efficiency, grind bed knife top and front edges at 5° as shown in the figure.

# MAINTENANCE RECORD

[illegible]

## TROUBLE-SHOOTING

**DANGER**

All adjusting must be made with the engine off.  
Do not do any investigation of the working parts of the machine with the motor running.  
Always turn the engine off!

### Tractor Unit

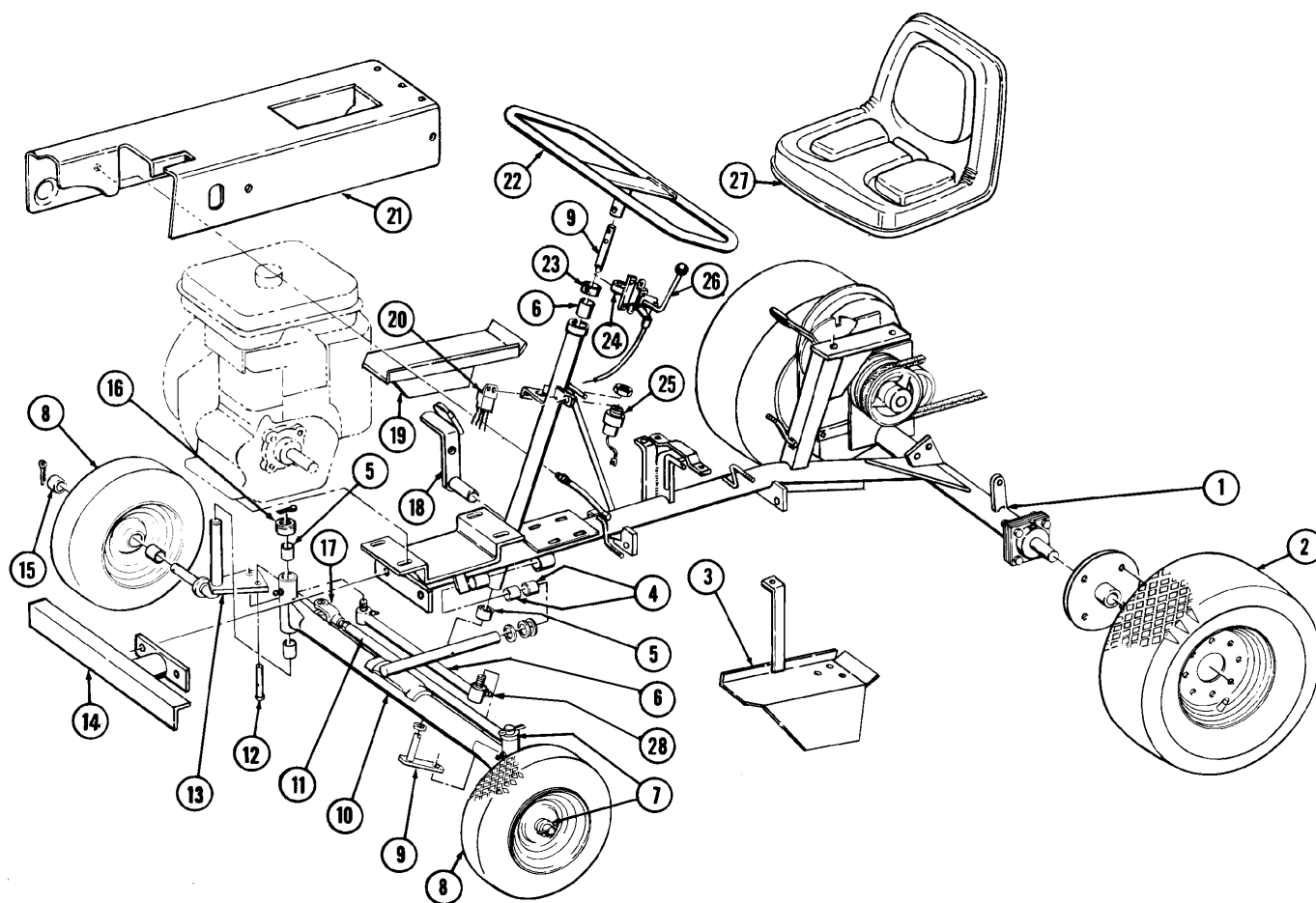
Situation	Things To Check
Engine will not start	Turn ignition switch to on Ensure that there is sufficient gasoline (petrol) in the tank Make sure safety switches are making contact and mowing clutch is in neutral Look for a loose wire on ignition or spark plug wire not connected Interlock system inoperative—check wiring, see "Electrical Diagrams" Operator must be positioned on seat to depress safety switches (Model 68 DL only)
Mower will not move	Differential gear selector must be in one of the drive positions Engine drive clutch must be engaged Drive belts too loose (see "Drive Belt Tension" in Maintenance section) Visually check to see that pulleys are not slipping on shafts If everything above is OK, check for a damaged gear(s) in the differential gear box
Mower will not stop	Ensure that the main clutch is disengaged (brake will not stop engine) Brake adjustment or service may be needed.

### Cutting Units

Situation	Things To Check
Cutting units will not turn.	Clutches may not be engaged Look for anything that could be jammed between the reel and the bed knife Drive belts or drive chain may need tightening Visually check that both the drive pulleys and the shafts are rotating
Cutting units turn but will not cut	Reel bed knife position may be out of adjustment (see "Reel to Bed Knife Adjustment" in Maintenance section) Drive belts or drive chain may need adjustment. Visually check that both the drive pulleys and the shafts are rotating
Cutting units will not stop turning	Disengage all clutches
Uneven cut	Set height of cut to the same height on each cutting unit (see "Cutting Height Adjustment" in Operation section of this manual.) Check to see if any part is bent Something may be jammed in cutting unit pivots and/or lift pivots, preventing the cutting units from floating

# PARTS LIST

---

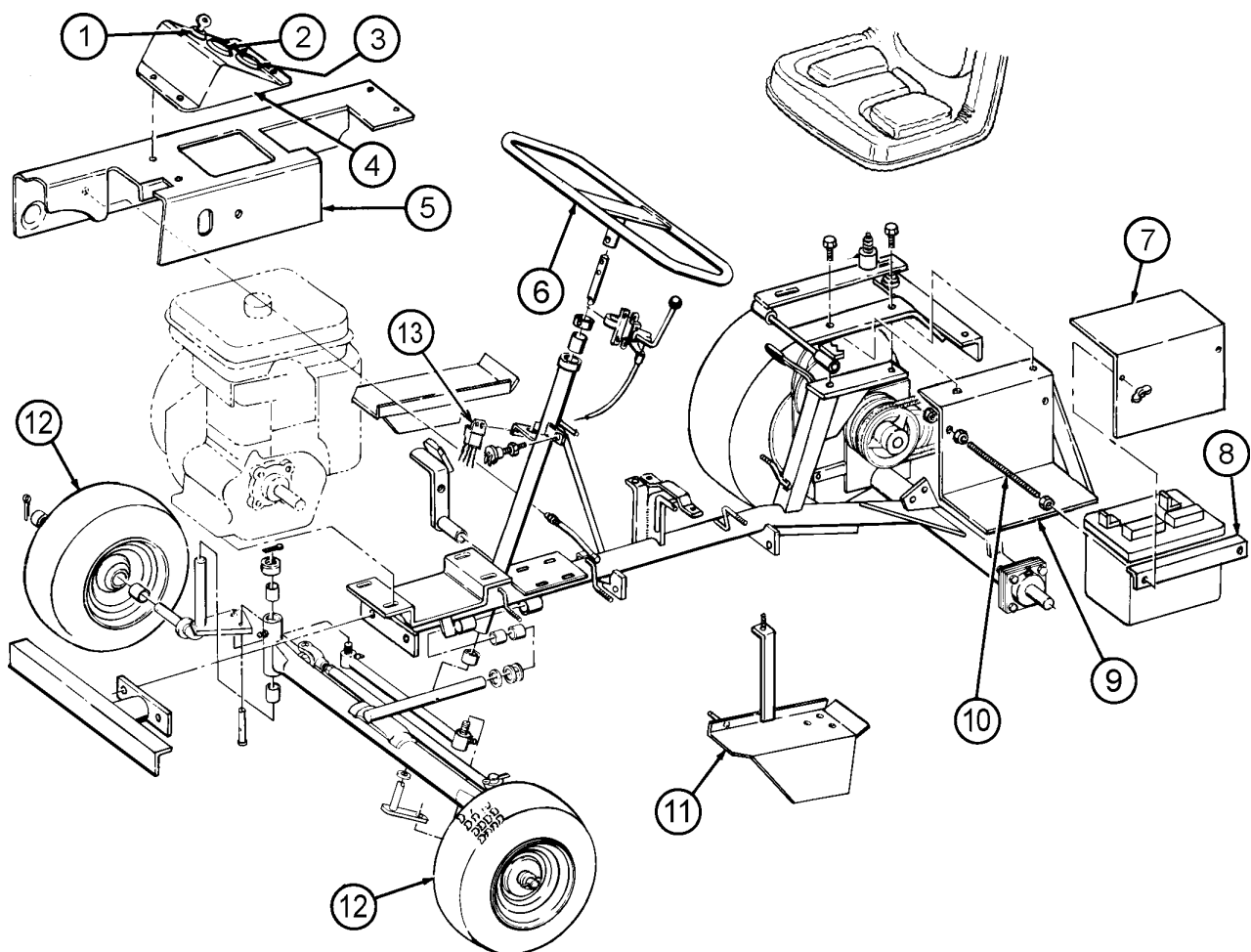


## FRAME & RUNNING GEAR



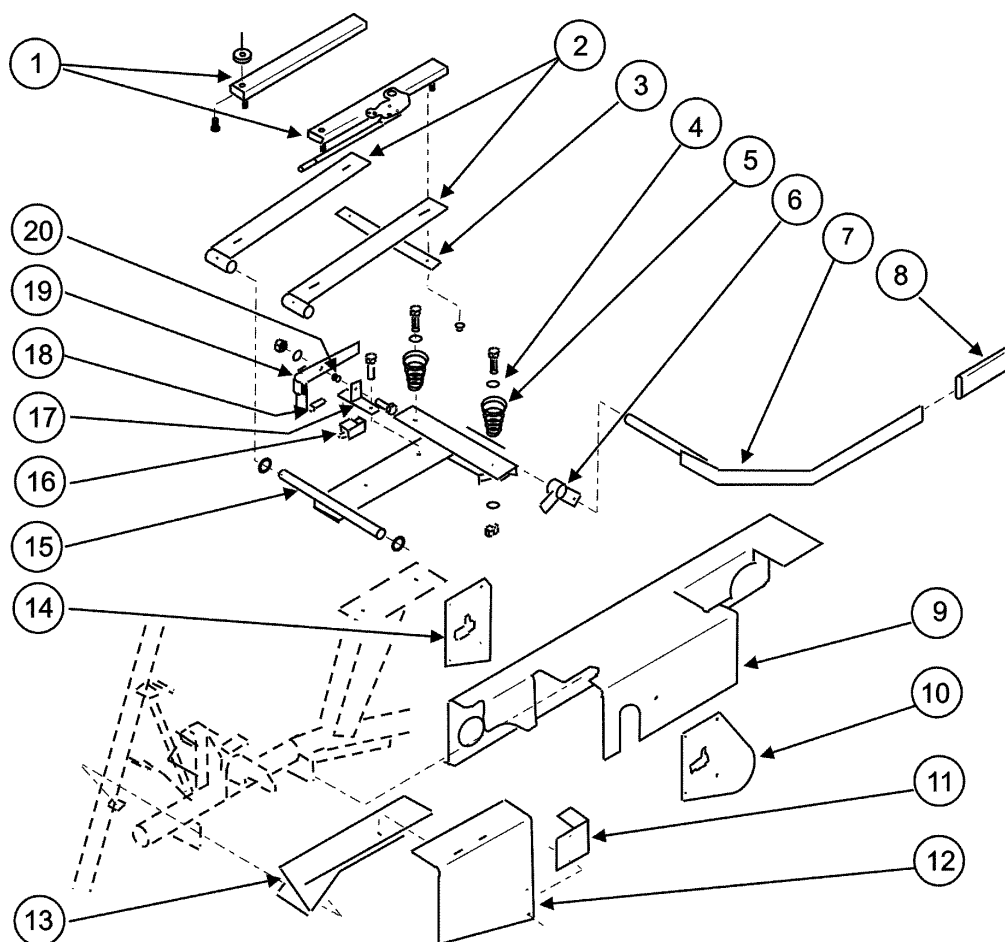
## FRAME & RUNNING GEAR

Item	Part No.	Description	Qty.
1	200002	FRAME	1
2	07018	REAR TIRE & WHEEL ASSEMBLY	2
3	200085	FOOT REST, Left Hand	1
4	201961	BUSHING, Axle Pivot	2
5	06002	BUSHING, Spindle and Steering Post	6
6	09014	DRAG LINK	1
7	200193	KING PIN, Left Hand	1
8	07038	TIRE & WHEEL	2
9	200094	SHAFT, Steering	1
10	201427	AXLE ASSEMBLY, Front	1
11	201851	TIE ROD	1
12	04003	PIN, Clevis Tie Rod	1
13	200196	KING PIN, Right Hand	1
14	200033	BUMPER, Front	1
15	06112	BEARING, Wheel Hub	4
16	02602	DUST CAP, 3/4" I.D.	2
	02603	DUST CAP, 7/8" I.D.	2
17	200863	CLEVIS, Threaded, Tie Rod	1
18	200104	PEDAL, Brake	1
19	200139	FOOT REST, Right Hand	1
20	07560	SWITCH, Interlock	1
21	09217	GUARD, Main Belt	1
22	200200	STEERING WHEEL	1
23	200199	COLLAR, Steering Shaft	1
24	200203	BRACKET, Throttle Control	1
25	07034	SWITCH, Key, Briggs & Stratton and Kawasaki	1
26	07032	THROTTLE CONTROL, (Includes conduit and wiring)	1
27	07036	SEAT	1
28	200867	BALL JOINT	2



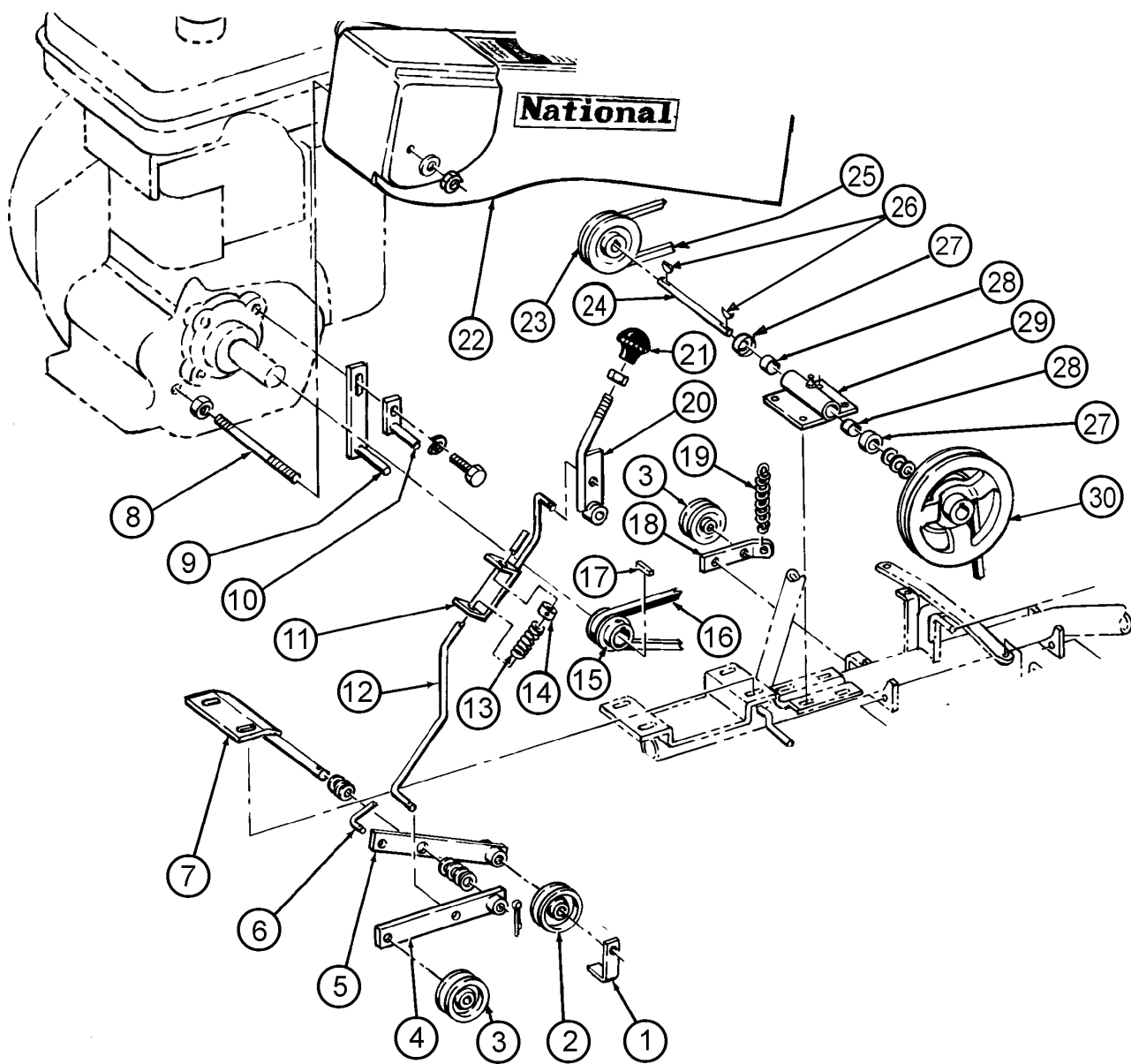
## RUNNING GEAR & MISC. PARTS -- MODEL 68 DL

Item	Part No.	Description	Qty.
1	07065	KEY SWITCH	1
2	07064	AMPMETER	1
3	07063	HOURLMETER	1
4	09098	DASHBOARD	1
5	09218	GUARD, Main Belt	1
6	200200	STEERING WHEEL	1
7	09101	COVER, Battery	1
8	201754	HOLDOWN, Battery	1
9	201582	BATTERY BOX	1
10	202447	ROD, Side Post Battery	2
11	201925	FOOT REST, Left	1
12	07038	TIRE, Deluxe Wide	2
13	07560	INTERLOCK	1



## SEAT MOUNTING & BELT GUARDS

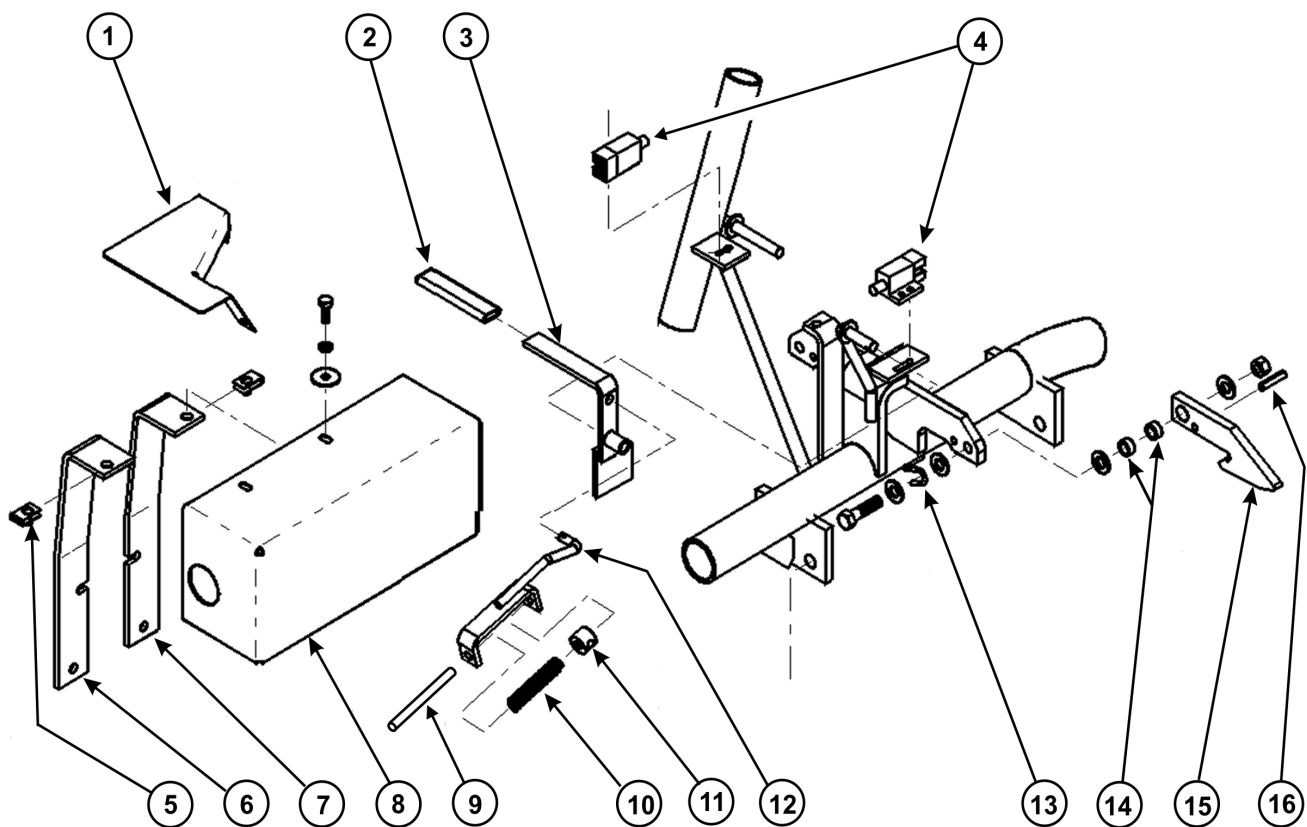
Item	Part No.	Description	Qty.
1	07101	ADJUSTER, Seat	1
2	200814	HINGE, Seat	2
3	205470	BRACKET, Seat Switch	1
4	02614	WASHER	2
5	04512	SPRING, Seat	2
6	202249	TUBE, Pivot	1
7	202251	HANDLE, Lifter	1
8	07039	GRIP, Handle	1
9	09218	GUARD, Main Belt (DL only)	1
	09217	GUARD, Main Belt (SR only)	1
10	09213	SHIELD, Latch Hook, L.H.	1
11	09216	GUARD, Pulley (DL only)	1
12	09100	GUARD, Engine Clutch (DL only)	1
	09002	GUARD, Engine Clutch (SR only)	1
13	205485	GUARD, Pulley	1
14	09220	SHIELD, Latch Hook, R.H.	1
15	202343	ASSEMBLY, Seat Bracket	1
16	07325	SWITCH	1
17	205459	PIVOT, Switch	1
18	202798	SPRING, Return	1
19	205460	ARM, Spring	1
20	200123	BUSHING	1



**DRIVE MECHANISM -- UPPER PORTION**

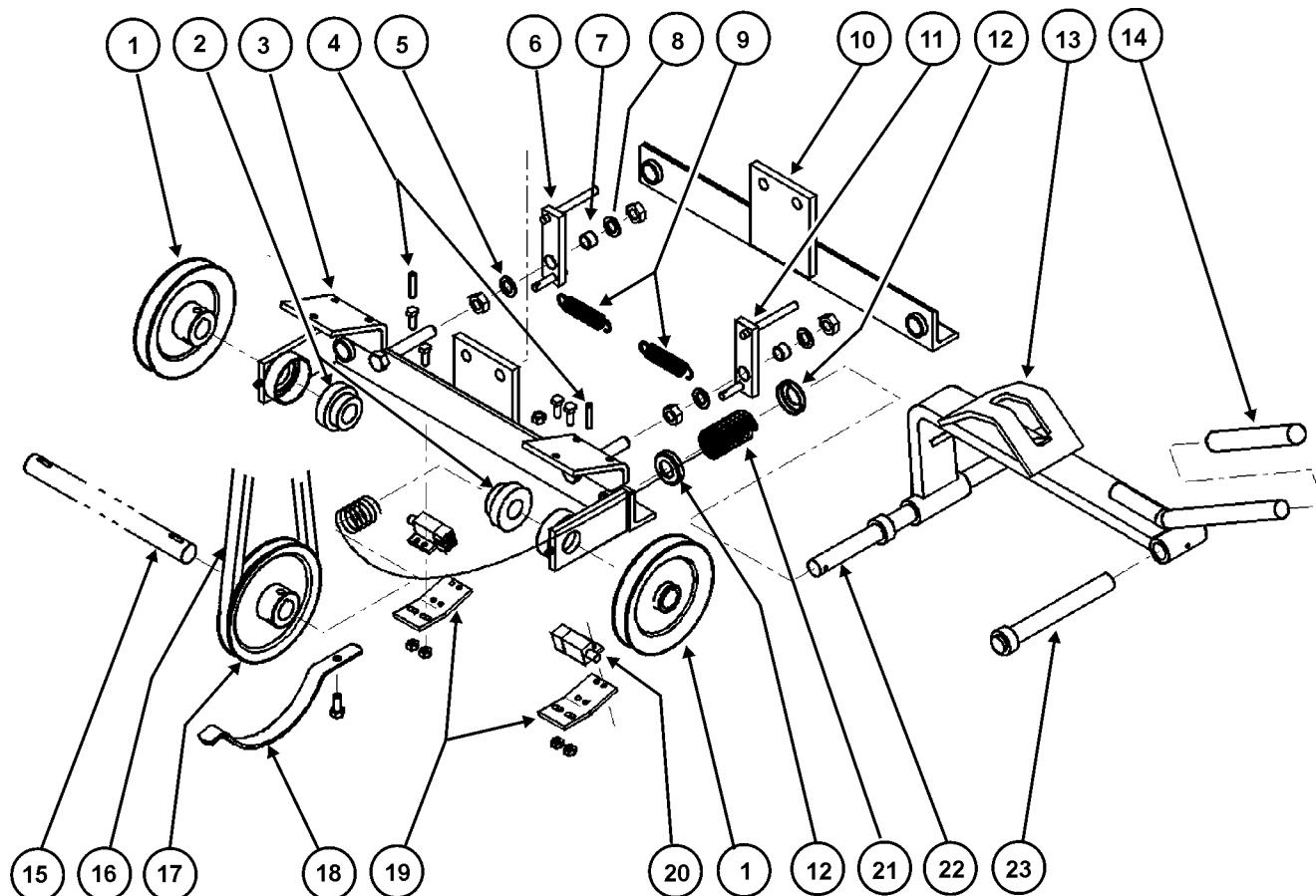
## DRIVE MECHANISM -- UPPER PORTION

Item	Part No.	Description	Qty.
1	200530	GUIDE, Belt, High Speed Pulley	1
2	03607	PULLEY, Countershaft Idler	1
3	03608	IDLER, Engine Clutch	2
4	200179	ARM, Engine Clutch	1
5	200176	ARM, Countershaft Idler	1
6	200172	ROD, Countershaft Idler Control	1
7	200173	BRACKET, Idler Pivot	1
8	202445	STUD, Belt Guide	1
9	201541	BELT GUIDE, Lower	1
10	201538	BELT GUIDE, Upper	1
11	200165	ROD, Main Clutch, Upper	1
12	08021	ROD, Main Clutch, Lower	1
13	202437	SPRING	1
14	200162	COLLAR, Lock	1
15	03609	PULLEY, Motor	1
16	03903	BELT, Engine, Kawasaki, 6844 Gates Rated	1
17	200208	KEY, Square, Engine	1
18	200184	ARM, Main Belt Idler	1
19	04501	SPRING, Main Belt Idler Arm	1
20	200163	LEVER, Engine Clutch	1
21	07024	KNOB, Clutch Lever	1
22	09002	GUARD, Engine Clutch	1
23	03606	PULLEY, Main Countershaft	1
24	200157	COUNTERSHAFT, Main	1
25	03902	BELT, Drive, B66	1
26	04013	KEY, Woodruff, #11	1
27	02602	DUST CAP, 3/4" I.D.	2
28	06006	BUSHING, Main Countershaft Housing	2
29	200154	HOUSING, Main Countershaft	1
30	200158	STEP PULLEY, Main Countershaft	1
31	03901	BELT, Countershaft, A29	1



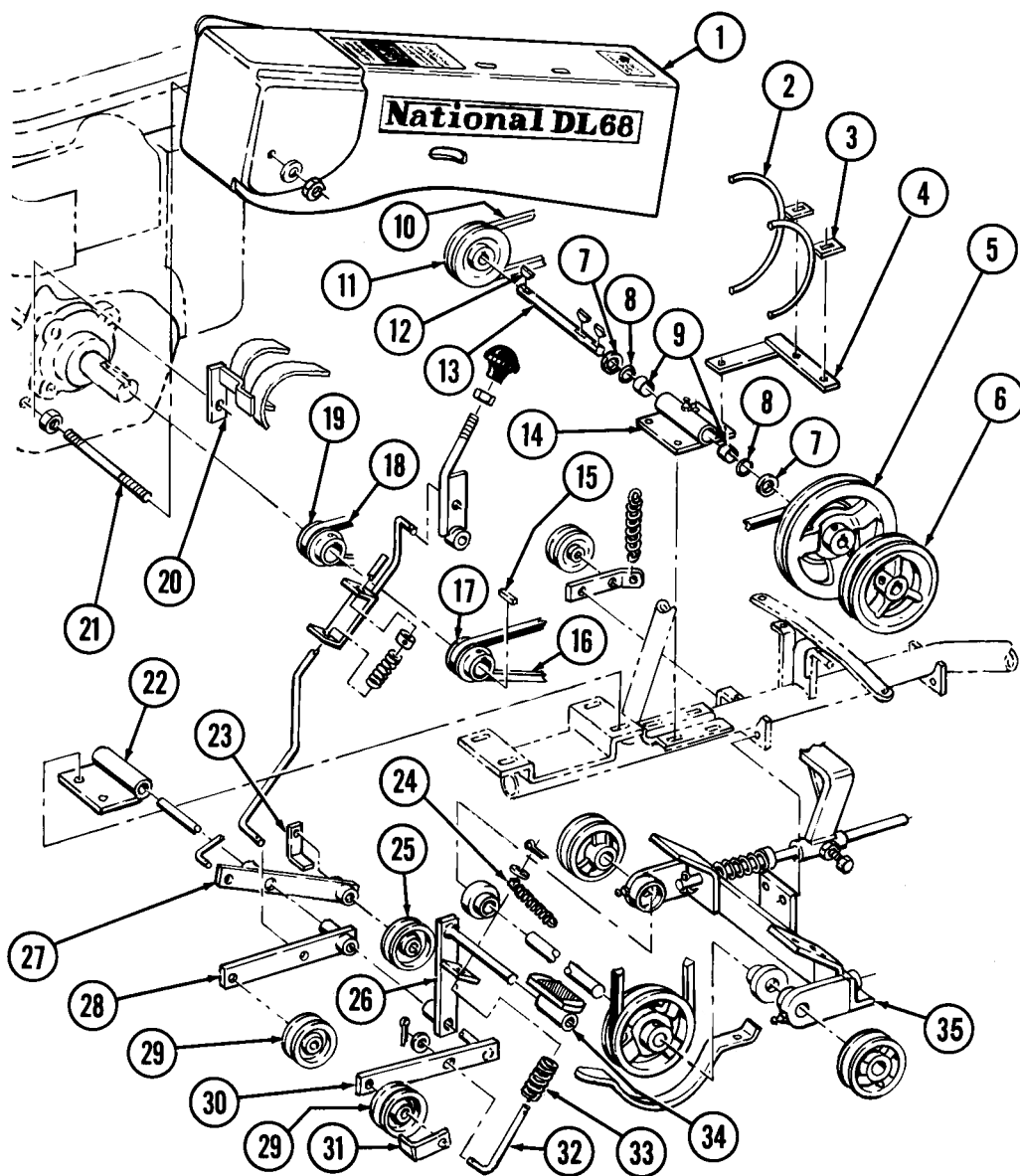
## DRIVE MECHANISM -- MIDDLE PORTION

Item	Part No.	Description	Qty.
1	203622	SHIELD, Engine	1
2	07023	GRIP, Lever, '96 and up	1
3	205486	LEVER, Lower Countershaft Control	1
4	07325	SWITCH, Control	2
5	02288	U-NUT, 1/4-20	2
6	205471	BRACKET, Muffler Guard, L.H.	1
7	205472	BRACKET, Muffler Guard, R.H.	1
8	205477	GUARD, Muffler	1
9	200172	ROD, Countershaft Idler Control (shown for reference only)	1
10	202437	SPRING	2
11	200182	COLLAR, Lock	2
12	200170	ROD	1
13	04552	SPRING, Lift Latch	2
14	200676	BUSHING	4
15	205451	HOOK, Wing Mower	2
16	04056	ROLL PIN, 0.25 x 1.12	2



## DRIVE MECHANISM -- LOWER PORTION

Item	Part No.	Description	Qty.
1	03615	PULLEY, Lower Countershaft	2
2	06105	BEARING, Lower Countershaft	2
3	205482	CARRIER, Lower Countershaft (Model 68SR only)	1
	205481	CARRIER, Lower Countershaft (Model 68DL only)	1
4	04056	ROLL PIN, 0.25 x 1.12	2
5	02614	WASHER	1
6	205458	PIVOT, Switch, R.H.	1
7	200123	BUSHING	1
8	02614	WASHER	1
9	202798	SPRING	2
10	200137	PULL ANGLE, Wing Mower, Rear	1
11	205461	PIVOT, Switch, L.H.	1
12	02602	DUST CAP, 3/4" I.D.	2
13	205454	PULL ARM, Wing Mower, Left and Right Hand	1
14	07226	GRIP, Wing Mower Arm	1
15	200135	COUNTERSHAFT, Lower	1
16	03901	BELT, Countershaft, A29	1
17	03603	PULLEY, Lower Countershaft Drive	1
18	200136	BELT GUIDE, Pulley	1
19	205462	BRACKET, Switch Mounting	2
20	07325	SWITCH, Control	2
21	04505	SPRING, Wing Mower Pull Rod	1
22	200151	PULL ROD, Wing Mower	1
23	201880	PIN, Wing Mower Arm	1

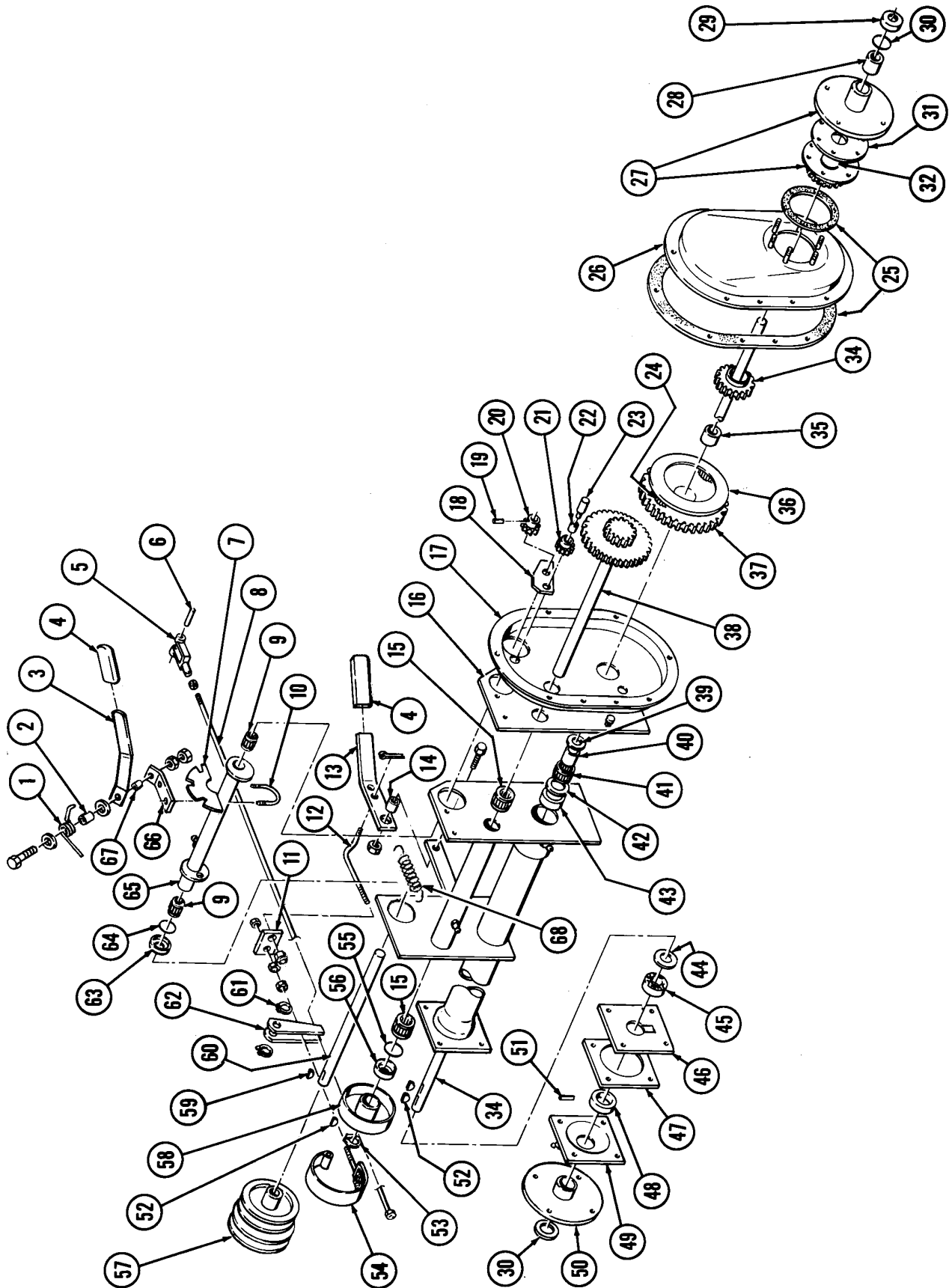


**DRIVE MECHANISM -- MODEL 68 DL**



## DRIVE MECHANISM -- MODEL 68 DL

Item	Part No.	Description	Qty.
1	09100	GUARD, Engine Clutch	1
2	201881	RETAINER, Mowing Belt	1
3	201884	RETAINER, Transport Belt	1
4	201890	MOUNT, Belt Guides	1
5	201872	STEP PULLEY, Main Countershaft	1
6	03603	PULLEY, Transport, Main Countershaft	1
7	02507	Washer, 10 GA.	2
8	03502	O-RING, 7/8" Dia.	2
9	06101	NEEDLE BEARING	2
10	03902	BELT, Drive, B66	1
11	03655	PULLEY, Main Countershaft	1
12	04013	KEY, Woodruff, #11	3
13	201871	COUNTERSHAFT, Main	1
14	201740	HOUSING, Main Countershaft	1
15	200208	KEY, Square, Engine	2
16	03926	BELT, Engine, Transport, 6841 Gates Power Rated	1
17	03602	PULLEY, Engine, Transport Belt	1
18	03903	BELT, Engine, Mowing, 6844 Gates Power Rated	1
19	03609	PULLEY, Engine, Mower Belt	1
20	202780	BELT GUIDE WELDMENT, Engine	1
21	202446	STUD, Belt Guide	1
22	201946	BRACKET, Idler Pivot with Bushings	1
23	200530	GUIDE, Belt	1
24	202441	SPRING, Transport Pedal Return	1
25	03608	PULLEY, Idler	1
26	201721	FOOT LEVER	1
27	201728	ARM, Idler, Lower Countershaft	1
28	201730	ARM., Idler, Mowing Belt	1
29	03607	PULLEY, Clutch Lever	1
30	201718	PULLEY LEVER, Transport	1
31	201889	GUIDE, Belt	1
32	201919	ROD, Transport Clutch	1
33	202440	SPRING, Transport	1
34	201966	PEDAL, Transport	1
35	205481	CARRIER, Lower Countershaft	1

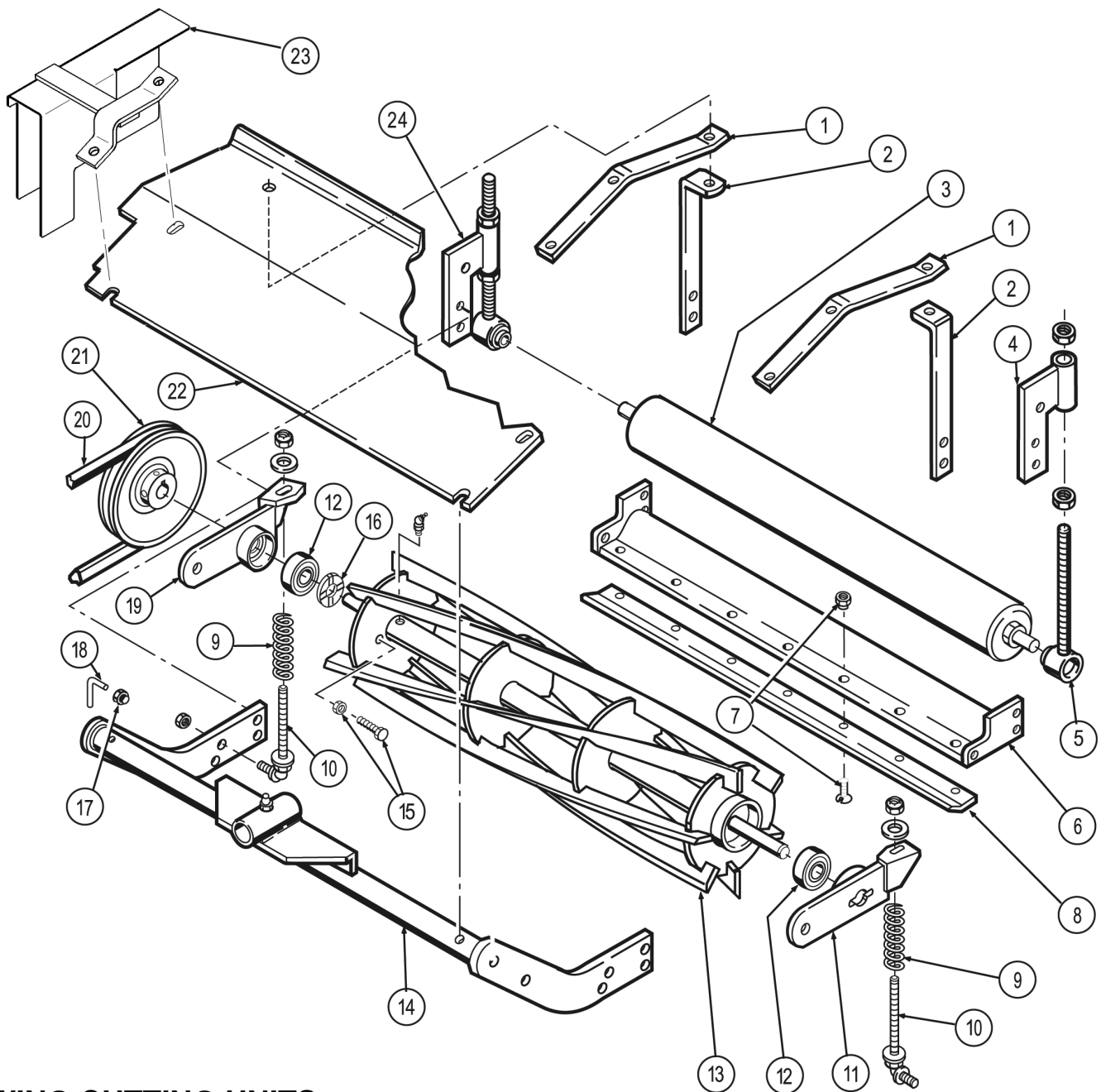


REAR AXLE & DIFFERENTIAL

## REAR AXLE & DIFFERENTIAL

Qty.			
Item	Part No.	Description	Qty.
1	04502	SPRING, Shifter Lever	1
2	200675	BUSHING, Shifter Lever Bushing	1
3	205434	SHIFTER LEVER	1
4	07007	GRIP, Shifter	1
5	04021	CLEVIS, Brake	1
6	04022	PIN, Brake Pedal, 3/8" x 1-1/4"	1
7	200061	STOP DISC, Shifter	1
8	200103	ROD UNIT, Brake	1
9	06102	NEEDLE BEARING, Rear Countershaft	2
10	08010	U-BOLT, Shifter	1
11	201432	BRACKET, Parking Brake Pull	1
12	08037	ROD, Formed, Parking Brake	1
13	205450	LEVER, Parking Brake	1
14	200676	BUSHING	1
15	06101	NEEDLE BEARING, Intermediate Shaft	2
16	07003	GASKET, Back Plate Cover	1
17	200234	COVER, Differential Case, Inside	1
18	200051	SLIDING WASHER, Differential Case	1
19	04008	PIN, Spring (Roll Pin), 5/16" x 1-1/8"	1
20	200054	GEAR, Shifting, 11 Tooth	1
21	200050	GEAR, Reverse	1
22	06003	BUSHING, Reverse Gear	1
23	200049	SHAFT, Reverse Gear	1
24	200069	PINION, Differential	4
25	07009	GASKET SET, Differential	1
26	200065	COVER, Differential Case, Outside	1
27	200079	HUB, Rear Wheel, Right	1
28	06005	BUSHING, Rear Wheel Hub	2
29	200680	DUST WASHER, 1-1/8"	1
30	03504	O-RING, 1-1/8"	1
31	200084	SPLIT DISC SEAL, Wheel Hub, Right Rear	1
32	03503	SEAL, Oil	1
34	200075	AXLE ASSEMBLY, Rear	1
35	06004	BUSHING, Bull Gear	2

Item	Part No.	Description	Qty.
36	09012	RETAINING RING, Pinion gear	1
37	200066	BULL GEAR ASSEMBLY, Complete	1
38	200070	SHAFT UNIT, Intermediate	1
39	02607	WASHER, 1-1/8" I.D.	1
40	200088	SLEEVE, Axle Bearing	1
41	06103	BEARING, Right Axle	1
42	02510	SPACER, Right Axle	1
43	03510	SEAL, Rear Axle	1
44	02510	WASHER, Bearing, Left Axle, 1-1/8"	1
45	06104	BEARING, Left Axle	1
46	200687	SHIM, Left Axle, 10 Ga.	AR
	200821	SHIM, Left Axle, 14 Ga.	AR
47	200685	SPACER, Left Axle, 1/32"	AR
	200688	SHIM, Axle Spacer, 22 Ga.	AR
48	200095	COLLAR, Rear Axle	1
49	200096	CAP, Left Axle	1
50	200090	WHEEL HUB, Left Rear	1
51	04016	PIN, Collar, Rear Axle, 1/4" x 1-3/4"	1
52	04013	KEY, Woodruff, #11	4
53	04020	LOCK RING, 7/8"	1
54	200099	BRAKE BAND ASSEMBLY	1
55	03502	O-RING, 7/8"	1
56	02603	DUST CAP, 7/8"	1
57	03618	PULLEY, Step	1
58	200097	BRAKE DRUM	1
59	04012	KEY, Woodruff, #9	1
60	200055	SHAFT, Shifting Countershaft	1
61	04011	LOCK RING, 3/4"	1
62	200102	LEVER, Brake Band	1
63	02602	DUST CAP, 3/4"	1
64	03511	O-RING, 3/4"	1
65	200056	COUNTERSHAFT CARRIER UNIT, Shifting	1
66	200063	CARRIER, Shifter	1
67	200676	BUSHING, Shifter Lever	1
68	04547	SPRING	1

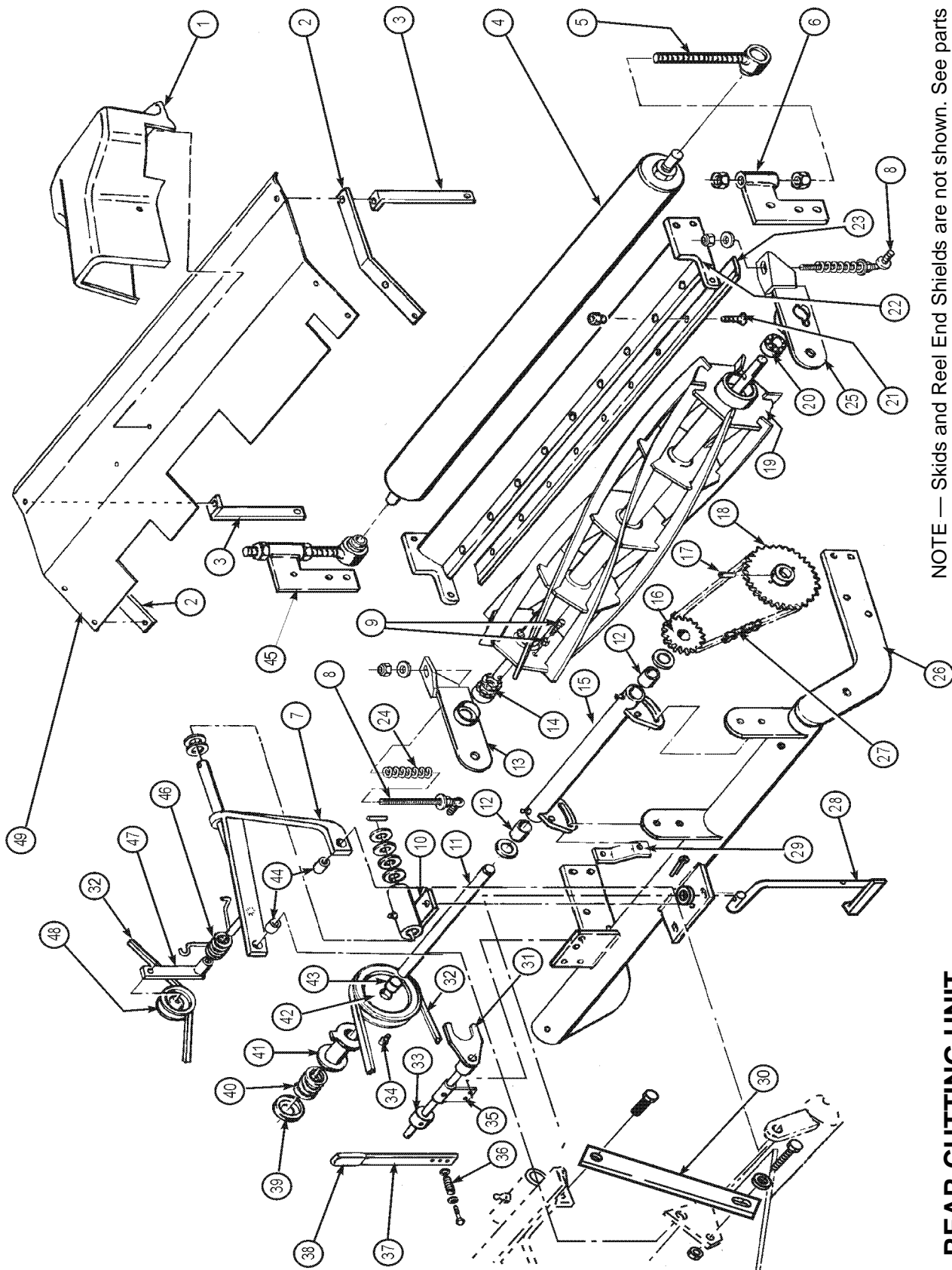


# WING CUTTING UNITS

NOTE — Skids and Reel End Shields are not shown.  
 See parts page "Skids, Reel End Shields & Guards"

## WING CUTTING UNITS

Item	Part No.	Description	Qty.
1	201513	BRACKET, Shield	4
2	200235	UPRIGHT, Shield	4
3	204497	ROLLER, 21"	2
4	203248	ROLLER BRACKET, L.H.	2
5	204495	ADJUSTER, Roller	4
6	201775	FRAME, Bed Knife, Bolt-on	2
7	02109	SCREW, Flat Head	14
	201802	NUT, Bed Knife Screw	14
8	201504	BED KNIFE, 21",	2
9	04549	SPRING, Reel Adjusting	2
10	200236	REEL TAKE-UP ASSEMBLY	4
11	302550	REEL CARRIER ASSEMBLY, Left Hand	2
12	06120	BEARING, Reel, (Includes Race)	4
13	200296	REEL ASSEMBLY, 6 Blade	2
14	201781	FRAME, Wing Mower	2
15	200256	ADJUSTING SCREW & NUT, Bearing	2
16	201437	TAKE-UP WASHER, Reel Bearing	2
17	201383	CAP SCREW (Special), Pulley Scraper	2
18	200287	PULLEY SCRAPER	2
19	302549	REEL CARRIER ASSEMBLY, Right Hand	2
20	03931	BELT, Wing Cutting Unit (Gates A34)	2
21	03601	PULLEY	2
22	201520	SHIELD, Right Hand	1
	201521	SHIELD, Left Hand	1
23	202261	SHIELD, Belt, L.H.	1
	202260	SHIELD, Belt, R.H.	1
24	203172	ROLLER BRACKET, R.H.	2

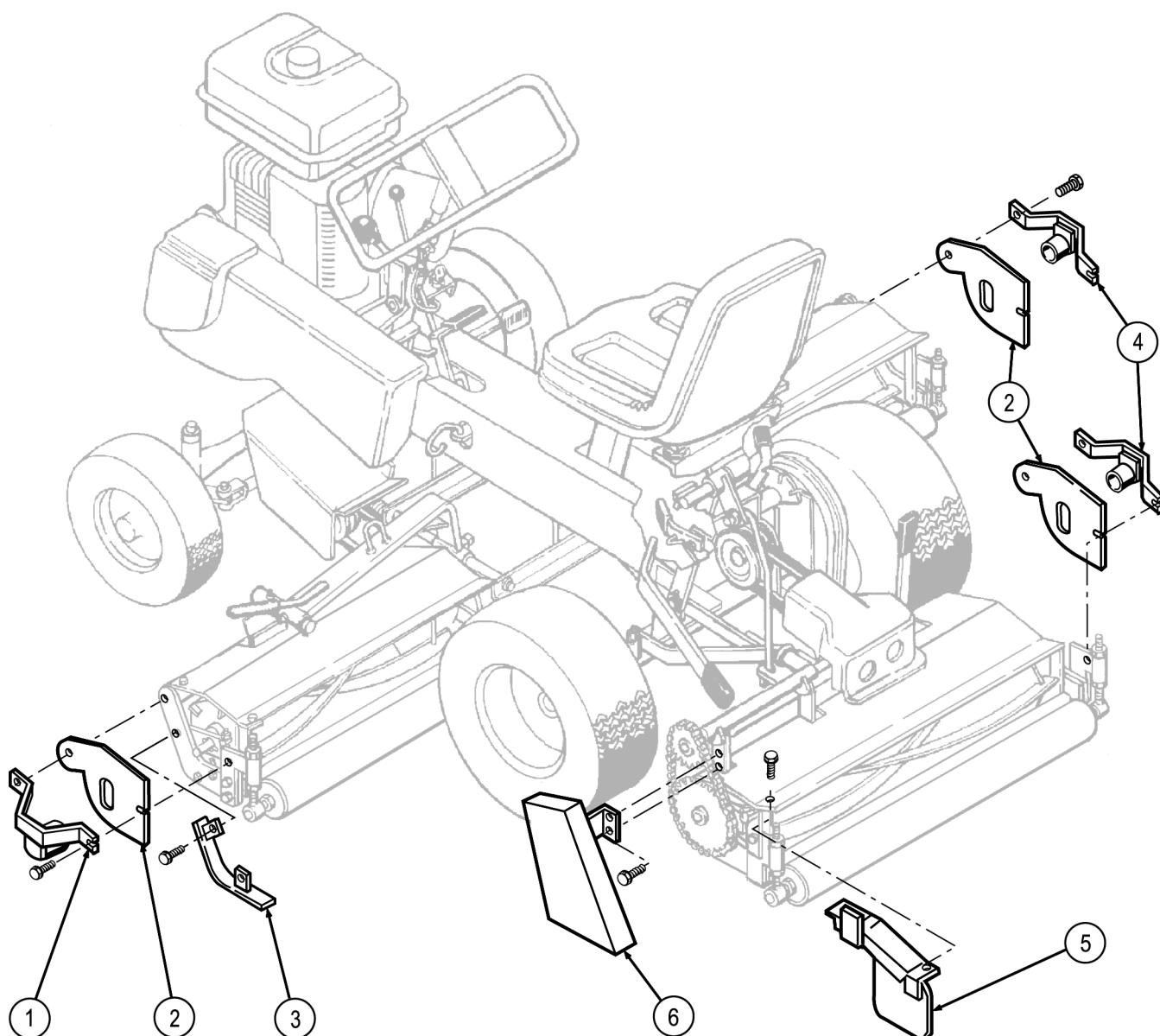


NOTE — Skids and Reel End Shields are not shown. See parts page "Skids, Reel End Shields & Guards"

## REAR CUTTING UNIT

## REAR CUTTING UNIT

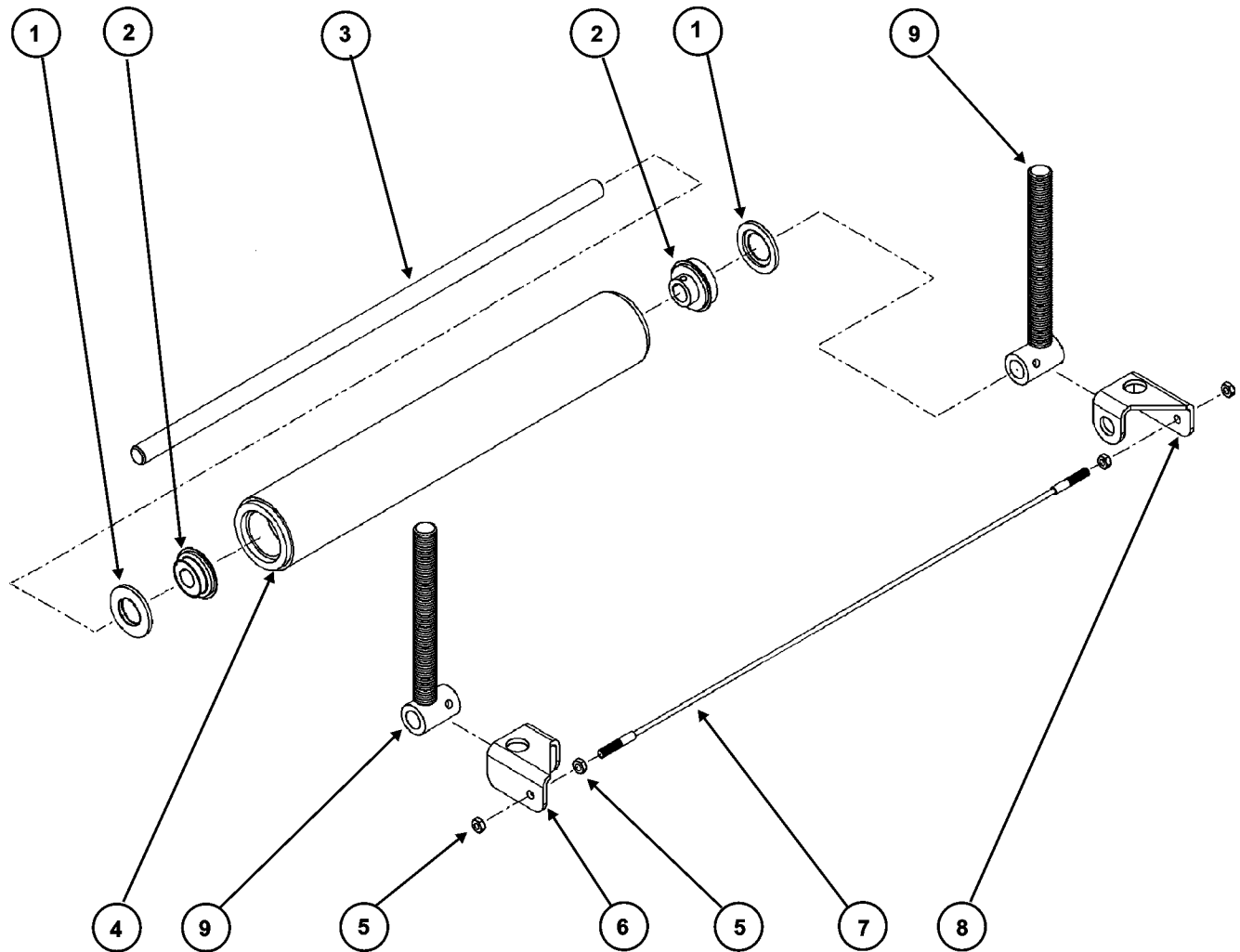
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	09170	GUARD, Clutch, Rear Mower, '96 and up	1	25	302550	REEL CARRIER ASSEMBLY, Left Hand	1
2	201513	BRACKET, Shield	2	26	200223	FRAME, Rear Mower	1
3	200235	UPRIGHT, Shield	2	27	07481	CHAIN, Roller, Rear Mower	1
4	204498	ROLLER	1	28	203452	LIFTER TEE, Rear Mower	1
5	204495	ADJUSTER, Roller Bracket	2	29	200214	BRACKET, Guard	1
6	203248	ROLLER BRACKET, L.H.	1	30	202301	BRACE, Seat	1
7	200109	PULL YOKE, Rear Mower	1	31	200271	SHIFTER YOKE, Rear Mower	1
8	200236	REEL TAKE-UP ASSEMBLY	2	32	03905	BELT, Rear Mower, A42	1
9	200256	ADJUSTING SCREW & NUT, Bearing	2	33	200388	SHIFTER LUG	1
10	200237	PIVOT TUBE, Rear Mower	1	34	05022	PIN, Clutch	2
11	200263	COUNTERSHAFT	1	35	200273	BRACKET, Clutch Lever	1
12	06006	BUSHING, Countershaft	2	36	202438	SPRING	1
13	201735	REEL CARRIER ASSEMBLY, Right Hand	1	37	200276	LEVER, Clutch Shifter	1
14	201437	TAKE-UP, Reel Bearing	2	38	07022	GRIP, Shifter Clutch	1
15	200261	HOUSING, Countershaft, Rear Mower	1	39	02602	DUST CAP, 3/4" I.D.	1
16	03116	SPROCKET, Countershaft	1	40	04506	SPRING, Clutch	1
17	04008	PIN, Sprocket Hub, 5/16" x 1-1/8"	1	41	200266	CLUTCH, Sliding Jaw, Rear Mower	1
18	03115	SPROCKET, Reel	1	42	200264	PULLEY ASSEMBLY, Countershaft	1
19	200241	REEL ASSEMBLY, Rear Mower, 6 Blade	1	43	06007	BUSHING, Countershaft Pulley	1
20	06120	BEARING, Reel	2	44	200123	BUSHING, Pull Yoke	2
	06121	CUP, Reel Bearing	2	45	203172	ROLLER BRACKET, R.H.	1
21	02109	SCREW, Bed Knife (sold as a set with nut below)	9	46	04504	SPRING, Idler	1
	201802	NUT, Bed Knife Screw		47	200115	IDLER ARM UNIT, Rear Mower	1
22	201773	BED KNIFE FRAME ASSEMBLY, Rear Mower	1	48	03607	PULLEY, Idler	1
23	201407	BED KNIFE, 30"	1	49	201519	SHIELD, Rear Mower	1
24	04549	SPRING, Adjusting	2				



## SKIDS, REEL END SHIELDS & GUARDS

Item	Part No.	Description	Qty.
1	203728	SKID BAR, L.H.	1
2	202959	SHIELD, Wing Mower	3
3	201585	SKID, Mower	2
4	203727	SKID BAR, R.H.	2
5	202410	GUARD, Inside, Rear Mower	1
6	202281	CHAIN GUARD, Rear Mower	1





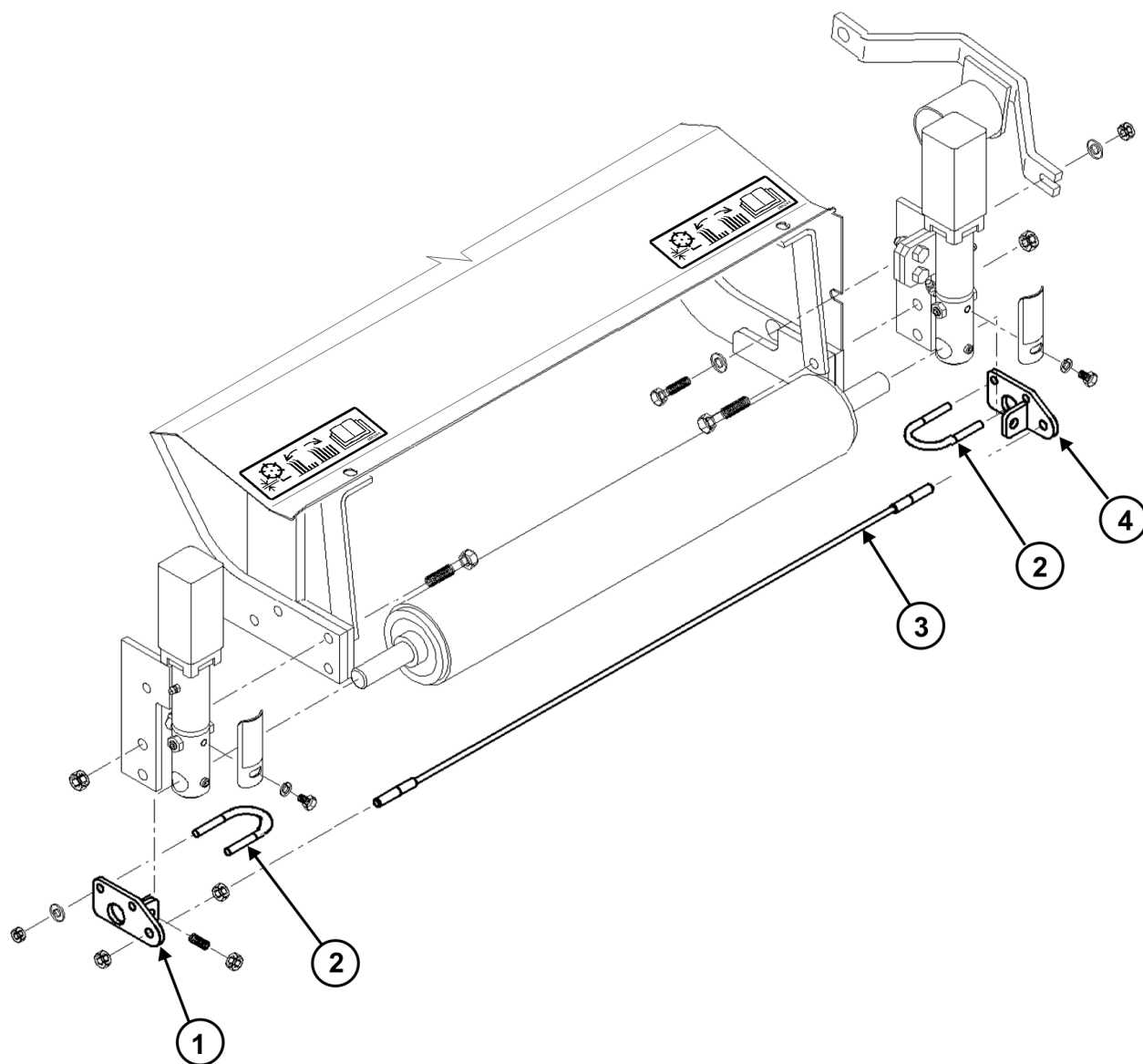
## ROLLERS & STANDARD SCRAPERS

**ROLLER ASSEMBLY (21") P/N 204497 (includes items 1-4)**

**ROLLER ASSEMBLY (30") P/N 204499 (Includes items 1-4)**

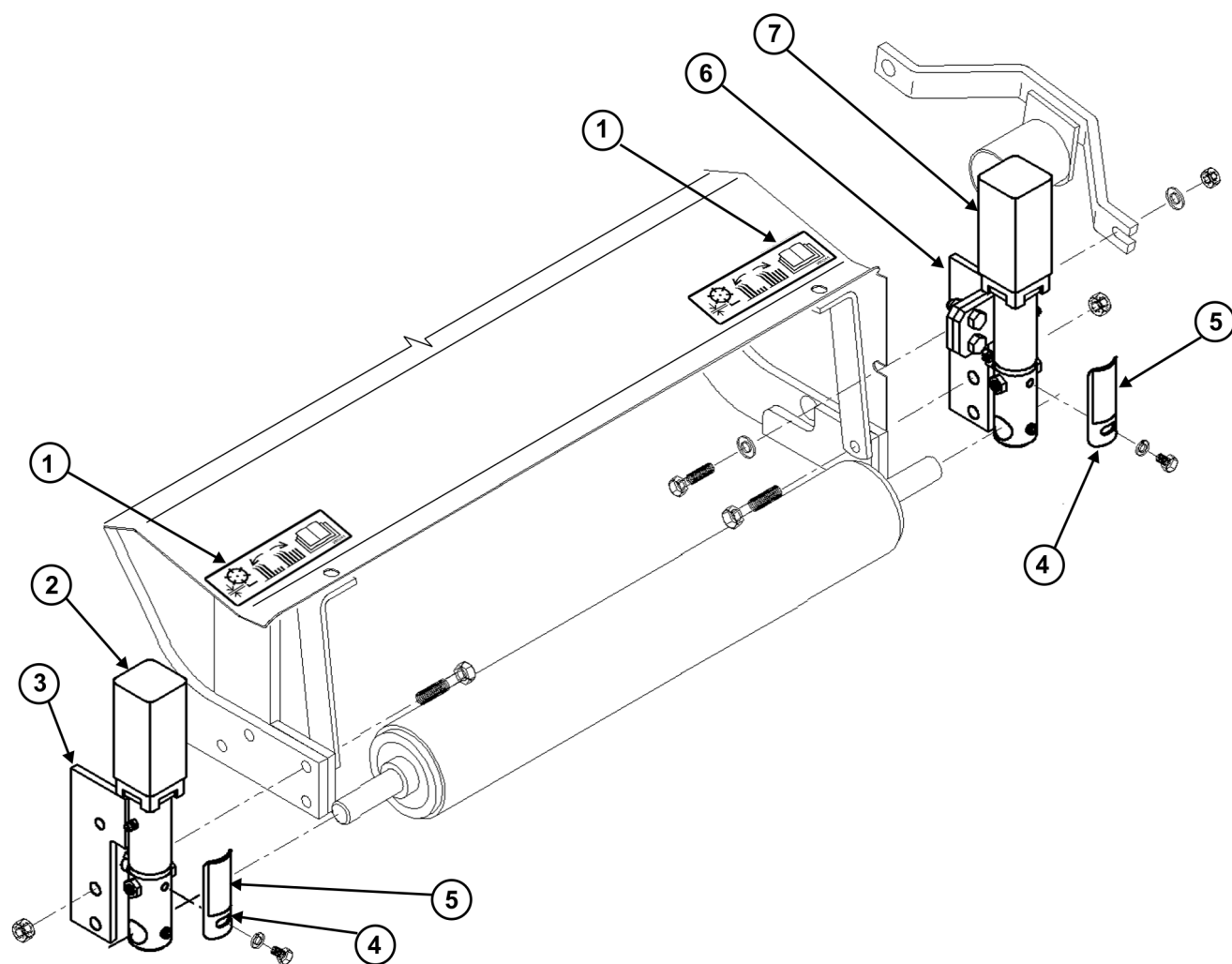
**ROLLER SCRAPER KIT P/N 860032 (includes items 5-8)**

Item	Part No.	Description	Qty.
1	205330	CAP, Bearing	2
2	06142	BEARING, Roller	2
3	204500	SHAFT, Roller (21")	1
	204499	SHAFT, Roller (30")	1
4	204502	WELDMENT, Roller (21")	1
	204501	WELDMENT, Roller (30")	1
5	02228	NUT, Jam, 5/16-24	12
6	205375	BRACKET, Roller Scraper, L.H.	3
7	09092	CABLE, Roller Scraper (21")	2
	09090	CABLE, Roller Scraper (30")	1
8	205376	BRACKET, Roller Scraper, R.H.	3
9	204495	ADJUSTER, Roller (not included)	-



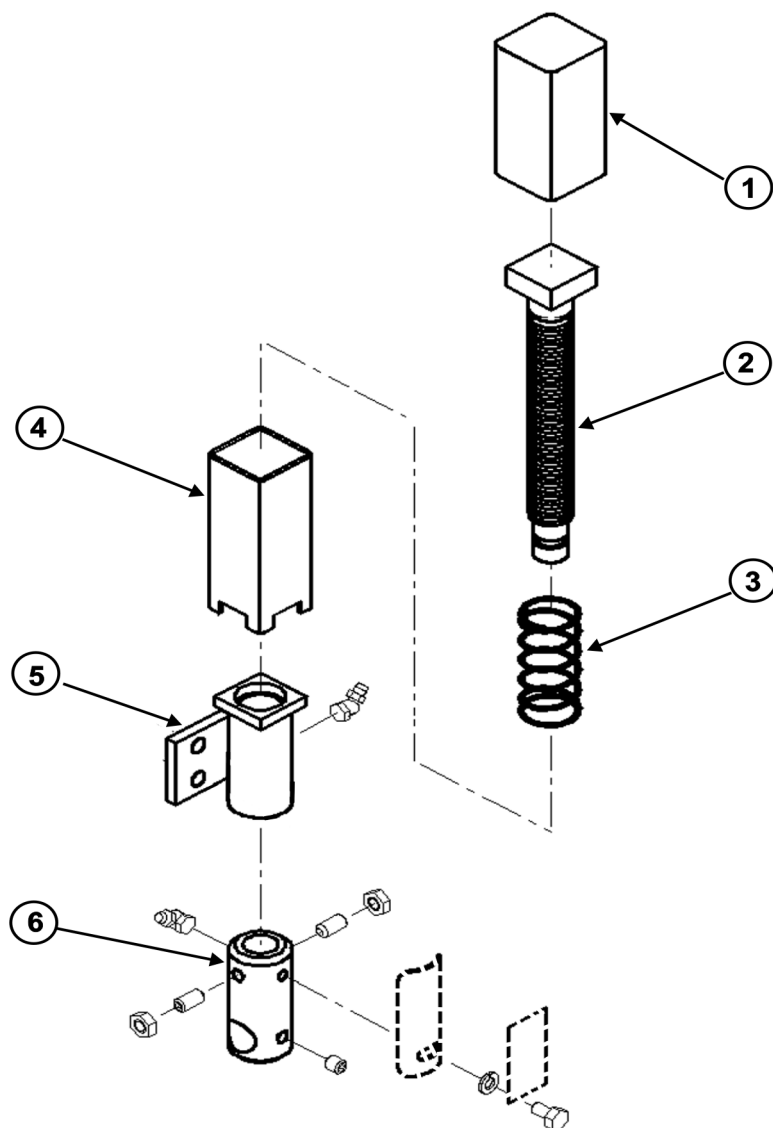
## DIAL-A-HEIGHT™ ROLLER SCRAPER KIT, P/N 860033 (includes items 1-4)

Item	Part No.	Description	Qty. per Kit
1	205384	BRACKET, Cable Mounting, L.H.	3
2	04107	U-BOLT, 1/4-20 x 1.25 ID x 2.25	6
3	09092	CABLE, Roller Scraper, Wing Cutting Unit	2
	09090	CABLE, Roller Scraper, Rear Cutting Unit	1
4	205385	BRACKET, Cable Mounting, R.H.	3



## DIAL-A-HEIGHT™ ROLLER ADJUSTER KIT, P/N 860034

Item	Part No.	Description	Qty. per Kit
1	205341	DECAL, Instruction	6
2	205348	ASSEMBLY, Roller Adjuster, L.H.	3
3	205380	WELDMENT, Roller Bracket, L.H.	3
4	204991	PLATE, Scale	6
5	205346	DECAL, Wing Cutting Unit	4
	205339	DECAL, Rear Cutting Unit	2
6	205381	WELDMENT, Roller Bracket, R.H.	3
7	205349	ASSEMBLY, Roller Adjuster, L.H.	3



## DIAL-A-HEIGHT™ ADJUSTER, P/N 205348 & 205349

Item	Part No.	Description	Qty.
1	204996	CAP, Vinyl	1
2	205334	WELDMENT, Threaded Rod	1
3	204995	SPRING	1
4	205345	WELDMENT, Socket	1
5	205399	WELDMENT, Height of Cut Adjuster, R.H.	1
	205400	WELDMENT, Height of Cut Adjuster, L.H.	1
6	204997	END, Swivel	1

# SAFETY SWITCHES

**DANGER**

Never attempt to remove or circumvent the safety switches. Dangerous operating conditions may result.

Your National 68 mower is equipped with safety switches to monitor the operating conditions of certain machine functions and stop the mower whenever unsafe conditions are found.

It is necessary for both the main engine clutch and the wing cutting unit clutch to be in their neutral position to start the engine. The 68 DL also requires the operator be in the seat. The 68 SR does not require the operator to be in the seat to facilitate use of the hand recoil starter.

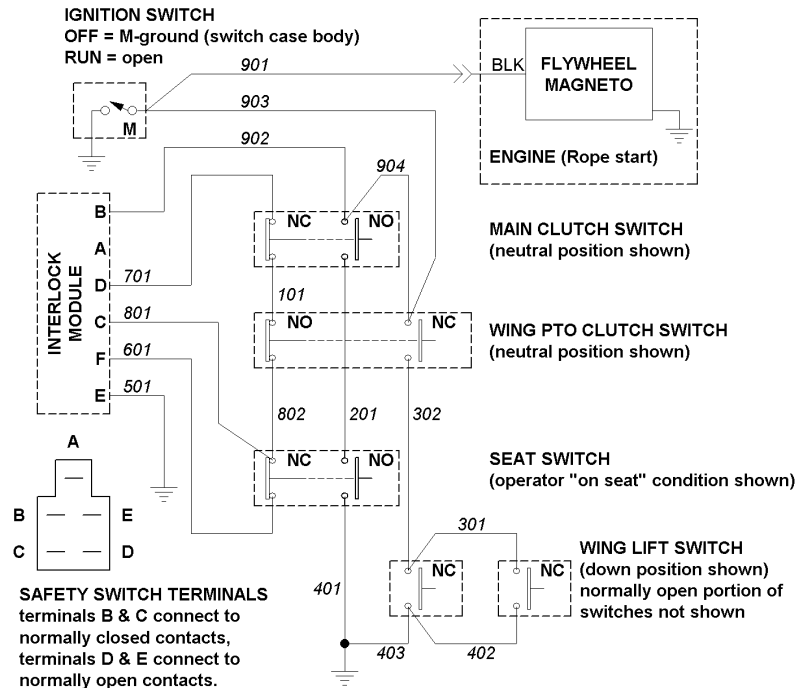
If you encounter difficulties starting the mower's engine, or keeping it running, check the chart below to make sure you are not causing the engine to kill or become unable to start.

With the engine off, and the ignition key removed, check the switches regularly to make sure they are unobstructed by grass clippings or other material. Make sure the electrical terminals remain clean and dry and the pivot mechanisms for each switch operate freely.

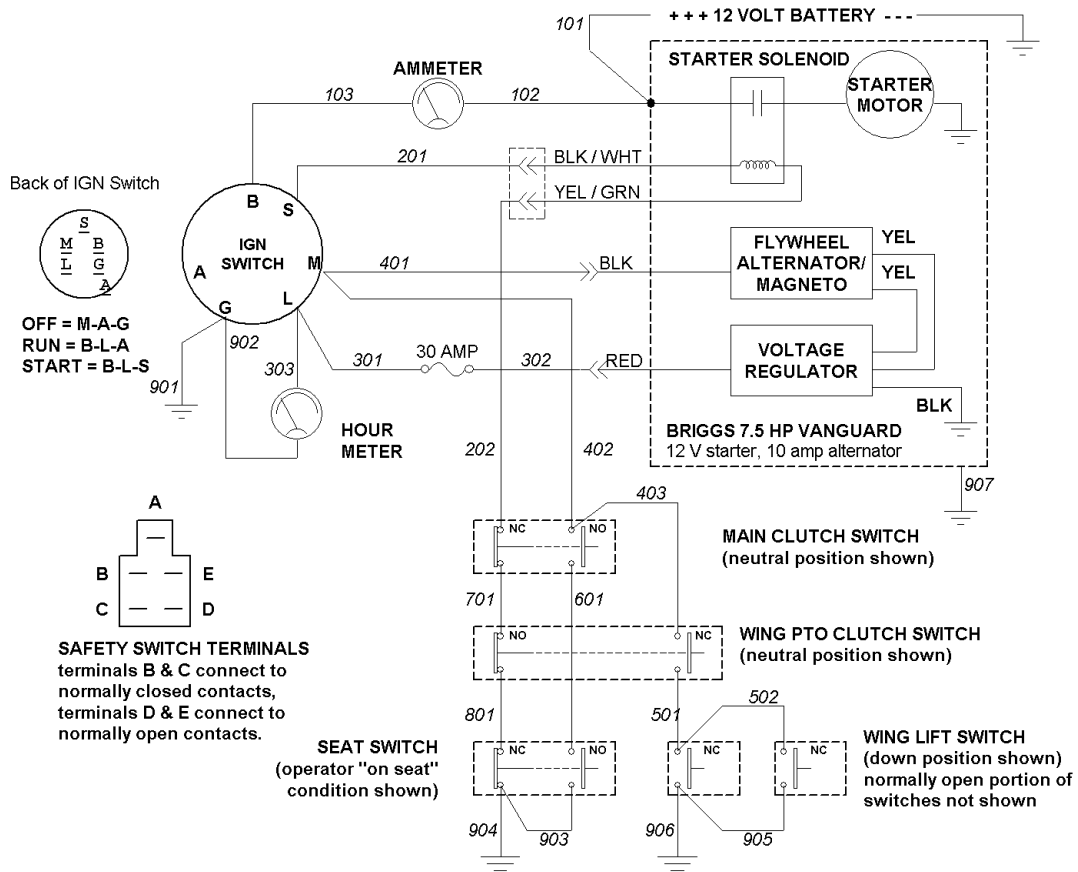
Never spray the mower safety switches directly with high-pressure water.

Main Engine Clutch	Wing Cutting Unit Clutch	Seat Switch (Operator Presence)	Wing Cutting Unit Lift Arms	68 DL Engine Response	68 SL Engine Response
ENGAGED	ENGAGED	OFF	DOWN	KILL	KILL
			UP	KILL	KILL
		ON	DOWN	RUN	RUN
			UP	KILL	KILL
	NEUTRAL	OFF	DOWN	KILL	KILL
			UP	KILL	KILL
		ON	DOWN	RUN	RUN
			UP	RUN	RUN
NEUTRAL	ENGAGED	OFF	DOWN	RUN	KILL
			UP	KILL	KILL
		ON	DOWN	RUN	RUN
			UP	KILL	KILL
	NEUTRAL	OFF	DOWN	RUN	START & RUN
			UP	RUN	START & RUN
		ON	DOWN	START & RUN	START & RUN
			UP	START & RUN	START & RUN

# ELECTRICAL DIAGRAMS



## MODEL 68 SR ELECTRICAL -- SAFETY SWITCH AND CIRCUIT DIAGRAM



## MODEL 68 DL ELECTRICAL -- SAFETY SWITCH AND CIRCUIT DIAGRAM

## ELECTRICAL PARTS-- MODELS 68 SR & 68 DL

Part No.		Description	Qty.
Model 68 SR	Model 68 DL		
07034	07065	KEY SWITCH	1
	07063	HOURMETER*	1
	07064	AMPMETER	1
		BATTERY (Exide GT-H or equiv., 12V, U1, 235 CCA @ 0°F)	1
	07104	GROUND WIRE, Battery	1
07570	07580	HARNESS ASSEMBLY	1
07325	07325	SWITCH, Safety	5
07560		INTERLOCK MODULE	1

\*Note: Your mower may be equipped with a digital hour meter. This meter will display a signal after 5 hours, and every 25 hours thereafter, recommending that you change the engine oil and lubricate the mower.

# SPECIFICATIONS

---

## MOWER DIMENSIONS & WEIGHT

Overall Length .....	79.13" (201 cm)
Width, Wing Mowers Folded .....	61.8" (157 cm)
Width, Wing Mowers Down .....	76" (193 cm)
Height .....	39.37" (100 cm)
Weight (empty) .....	659 lbs. (299 kg)

## ENGINE – BRIGGS & STRATTON 138400 SERIES

Engine Type .....	Forced Air Cooled, 4-cycle, Horizontal Shaft, OHV Engine
Number Of Cylinders .....	One
Piston Displacement .....	13.1 cu. in. (215 cc)
Maximum Horsepower .....	7.5 hp (5.6 kW) / 3600 rpm (Corrected per SAE J1349)
Direction Of Rotation .....	Counterclockwise, facing the power take-off shaft
Maximum Speed .....	3600 ±100 rpm
Fuel .....	Unleaded Gasoline (Petrol)
Fuel Tank Capacity .....	4.80 US qt (4.5 liter)
Maximum Fuel Consumption .....	0.68 gal/hr (2.4 liter/hr)
Oil .....	SAE 30 Engine Oil
Oil Capacity .....	30 fl. oz. (0.90 liter)
Carburetor .....	Float Type with Fixed Main Jet
Starter (68 SR) .....	Recoil Starter with Automatic Compression Release
Starter (68 DL) .....	Electric Starter and Recoil Starter
Lubrication Type .....	Splash
Air Cleaner .....	Dual Element
Muffler .....	Low Tone Type
Alternator .....	12v 10 A (68 DL)
Net Weight (Engine) .....	47 lbs (21.4 kg)

## SOUND & VIBRATION LEVELS

Average Measured Sound Power .....	99 dBA
Guaranteed Sound Power .....	105 dBA
Average Measured Sound Pressure, at operator position .....	87 dBA
Hand-Arm Vibration level .....	3.79 m/sec <sup>2</sup> rms
Whole Body Vibration level .....	0.86 m/sec <sup>2</sup> rms



## PARTS ORDERING INFORMATION

*When ordering replacement parts, always furnish:*

1. Your complete name, address, and phone number.
2. Model Number and Serial Number (stamped on the main frame rear axle gusset below seat)
3. Part Number (it is recommended that the correct number be verified with a current Master Price List).
4. The full Description of the part.
5. Quantity desired (quantity shown is the total number of parts contained in the particular view shown).

If the Part Number and the Description of your order do not agree, the Part Number will be used to fill your order.

*Note: For your records and future ordering, fill in the following information:*

Date Purchased	
Model Number	
Serial Number	
Distributor Name	
Address	
Phone	
FAX	
Web Site	
Sales Person	

## V-BELT CROSS-REFERENCE CHART

Function	National Number	Belt Mfr Number
Lower Countershaft	03901	A29
Main Belt	03902	B66
Main Clutch	03903	Gates 6844
Rear Cutting Unit	03905	A42
Transport (68DL)	03926	Gates 6841
Wing Cutting Units (2)	03931	A34

<p><b>DÉCLARATION DE CONFORMITÉ</b></p> <p>Je soussigné,</p> <p>National Mower Company 700 Raymond Avenue St. Paul, Minnesota 55114, États-Unis</p> <p>Déclare que les tondeuses autoportées à lames rotatives (cylindriques) suivantes :</p> <p>Tondeuse 68 SR Triplex et Tondeuse 68 DL Triplex d'une largeur de coupe de 173 cm (68 inch)</p> <p>sont conformes aux spécifications des directives UE suivantes et des modifications y afférentes :</p> <p>98/37/EC 89/336/EEC 2000/14/EC (notamment la « Procédure de contrôle interne de la production avec évaluation de la documentation technique et contrôle périodique » visée à l'Annexe VI de la directive,</p> <p>avec un niveau de puissance acoustique MESURÉ de 97 dB(A) et un niveau de puissance acoustique GARANTI de 105 dB(A).</p> <p><b>Nom et adresse de l'organisme notifié :</b></p> <p>Société Nationale de Certification et d'Homologation 11, route de Luxembourg L-5230 Sandweiler</p> <p><b>Signature autorisée :</b></p> <p><i>R S Kinkead</i> R. S. Kinkead III, Président</p> <p><b>Date et lieu de la déclaration</b></p> <p>Le 27 mars 2003 St. Paul, Minnesota, États-Unis</p>	<p><b>DECLARACION DE CONFORMIDAD</b></p> <p>Nosotros,</p> <p>National Mower Company 700 Raymond Avenue St. Paul, Minnesota 55114, USA</p> <p>Declaramos que los siguientes cortacéspedes de carrete de montaje (cilíndrico):</p> <p>Cortacésped 68 SR Triplex y Cortacésped 68 DL Triplex con un corte de 173 cm (68 inch) de ancho</p> <p>se ajustan a las especificaciones de las siguientes instrucciones de la Unión Europea y sus reformas actuales:</p> <p>98/37/EC 89/336/EEC 2000/14/EC (siguiendo el Anexo VI, Producción de Control Interno con evaluación de documentación técnica y revisión periódica)</p> <p>con un nivel MEDIDO de potencia del sonido de 97 dB(A), y un nivel GARANTIZADO de potencia del sonido de 105 dB(A)</p> <p><b>Nombre y dirección de la organización notificada:</b></p> <p>Societe Nationale de Certification et d' Homologation 11, route de Luxembourg L-5230 Sandweiler</p> <p><b>Firma Autorizada:</b></p> <p><i>R S Kinkead</i> R. S. Kinkead III, Presidente</p> <p><b>Fecha, Lugar de la Declaración</b></p> <p>Marzo 27, 2003 St. Paul, Minnesota USA</p>	<p><b>CONFORMITEITSVERKLARING</b></p> <p>Wij,</p> <p>National Mower Company 700 Raymond Avenue St. Paul, Minnesota 55114, VS</p> <p>verklaren hierbij dat de volgende zelfrijdende grasmaaimachines met (cilindervormige) rol:</p> <p>68 SR Triplex Mower en 68 DL Triplex Mower met een maaibreedte van 173 cm (68 inch)</p> <p>voldoen aan de specificaties van de volgende EU-richtlijnen en hun huidige amendementen:</p> <p>98/37/EC 89/336/EEC 2000/14/EC (overeenkomstig Annex VI, "Interne regeling van productie met evaluatie van technische documentatie en periodieke controle")</p> <p>bij een GEMETEN geluidsniveau van 97 dB(A) en een GEGARANDEERD geluidsniveau van 105 dB(A)</p> <p><b>Naam &amp; adres van op de hoogte gestelde instantie:</b></p> <p>Societe Nationale de Certification et d' Homologation 11, route de Luxembourg L-5230 Sandweiler</p> <p><b>Geautoriseerde handtekening:</b></p> <p><i>R S Kinkead</i> R. S. Kinkead III, President</p> <p><b>Datum en plaats van verklaring:</b></p>
---	---	---



700 Raymond Avenue  
P. O. Box 14299  
Saint Paul, Minnesota 55114-0299

Tel. 651.646.4079  
Fax: 651.646.2887

[www.nationalmower.com](http://www.nationalmower.com)



DECLARATION OF CONFORMITY  
KONFORMITÄTSEKTLÄRUNG  
DÉCLARATION DE CONFORMITÉ  
DECLARACION DE CONFORMIDAD  
CONFORMITEITSVERKLARING

## DECLARATION OF CONFORMITY

We,

National Mower Company  
700 Raymond Avenue  
St. Paul, Minnesota 55114, USA

Declare that the following riding reel (cylindrical)  
lawn mowers:

68 SR Triplex Mower, and  
68 DL Triplex Mower  
with 173 cm (68 inch) cutting width

conform to the specifications of the following EU  
Directives and their current amendments:

98/37/EC  
89/336/EEC  
2000/14/EC (following Annex VI, "Internal Control of  
Production with Assessment of Technical  
Documentation and Periodical Checking")

with a MEASURED sound power level of 97 dB(A),  
and  
a GUARANTEED sound power level of 105 dB(A)

Name & address of notified body:

Societe Nationale de Certification et d' Homologation  
11, route de Luxembourg  
L-5230 Sandweiler

Authorized signature:

*R. S. Kinkead III*  
R. S. Kinkead III, President

Date, Place Of Declaration

March 27, 2003  
St. Paul, Minnesota USA

## KONFORMITÄTSEKTLÄRUNG

Wir,

National Mower Company  
700 Raymond Avenue  
St. Paul, Minnesota 55114, USA

erklären, dass die folgenden Aufsitz-Spindelmäher:

68 SR Triplex-Mäher und  
68 DL Triplex-Mäher  
mit 173 cm (68 inch) Schnittbreite

den technischen Angaben der folgenden EU-  
Richtlinien und ihren derzeitigen Anhängen  
entsprechen:

98/37/EC  
89/336/EEC  
2000/14/EC (gemäß Anhang VI „Interne  
Fertigungskontrolle mit Begutachtung der  
technischen Unterlagen und regelmäßiger Prüfung“)

mit einem GEMESSENEN Schalleistungspegel von  
97 dB(A) und  
einem GARANTIERTEN Schalleistungspegel von  
105 dB(A)

Name & Anschrift der Anmeldebehörde:

Société Nationale de Certification et d' Homologation  
11, route de Luxembourg  
L-5230 Sandweiler

Rechtsverbindliche Unterschrift:

*R. S. Kinkead III*  
R. S. Kinkead III, Generaldirektor

Datum, Ort der Erklärung

27. März 2003  
St. Paul, Minnesota USA